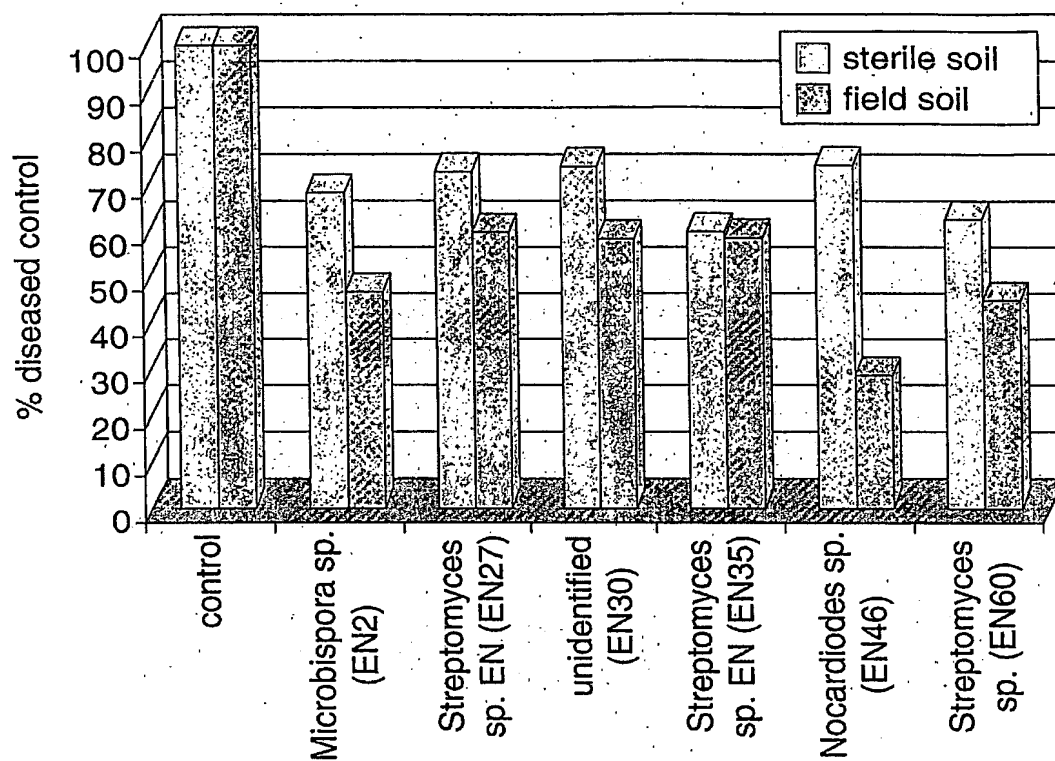


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BEST AVAILABLE COPY

Figure 1

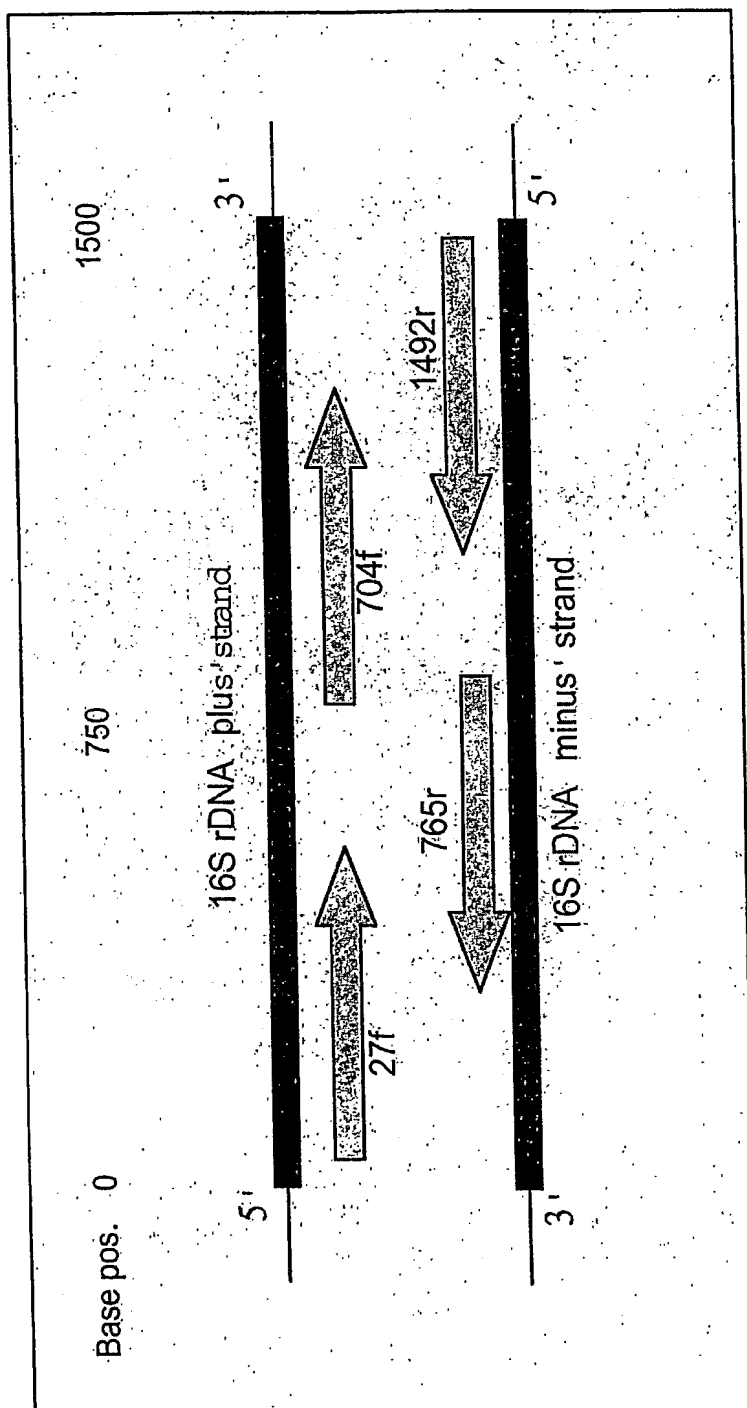
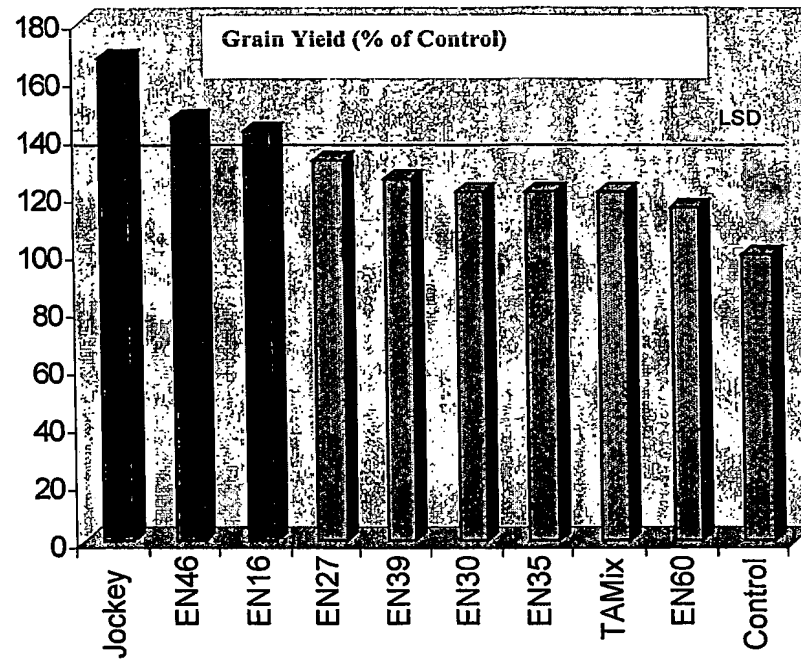
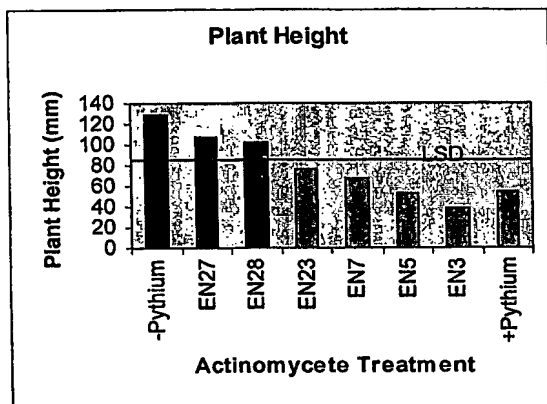
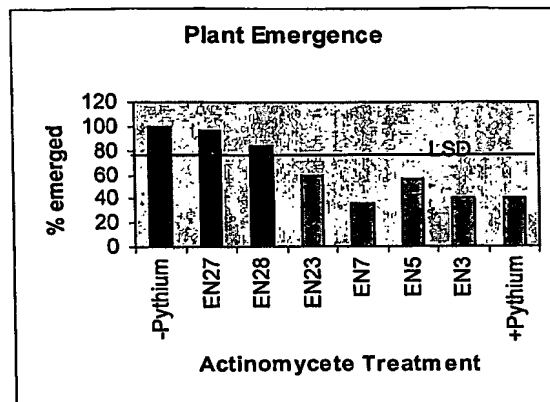


Figure 2

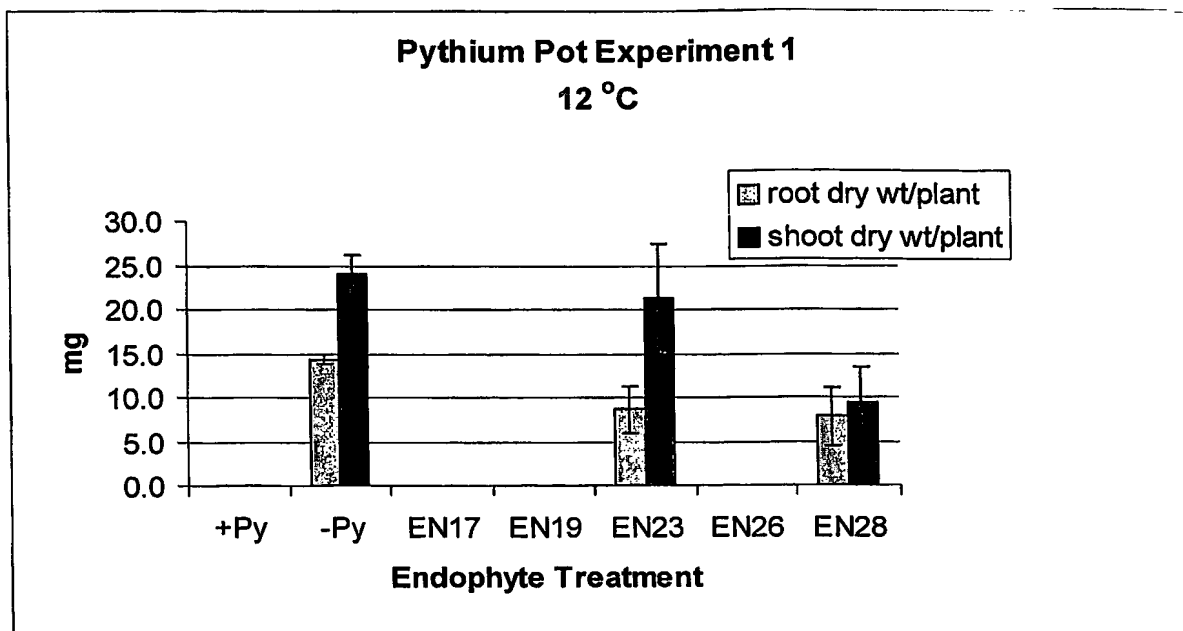
3/30

**Figure 3**

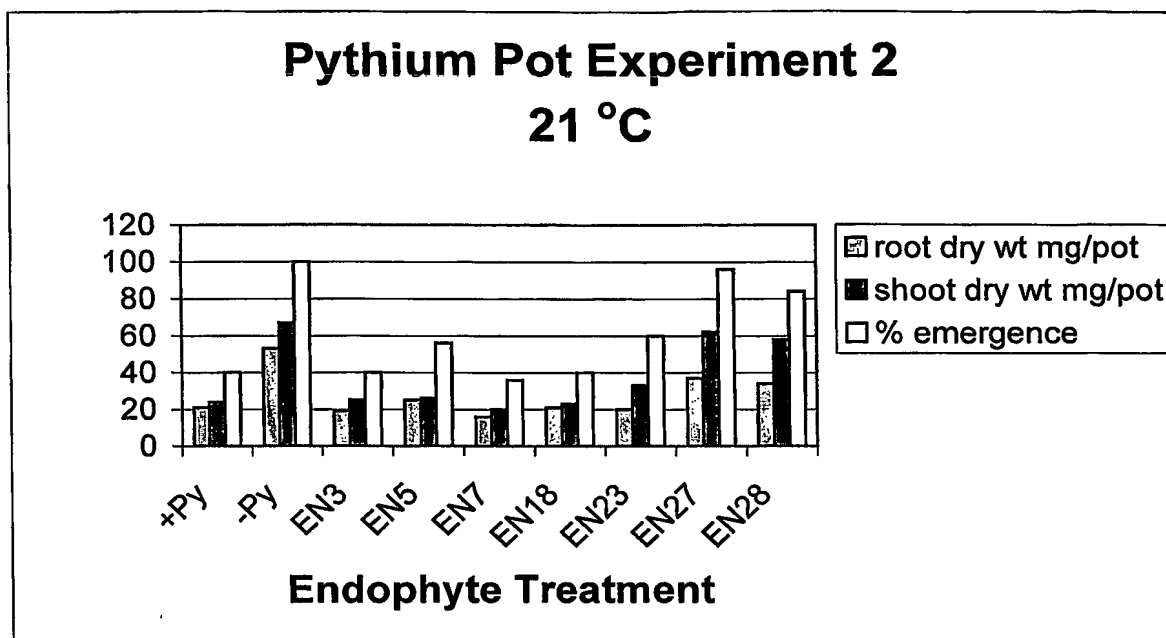
4/30

**Figure 4****Figure 5**

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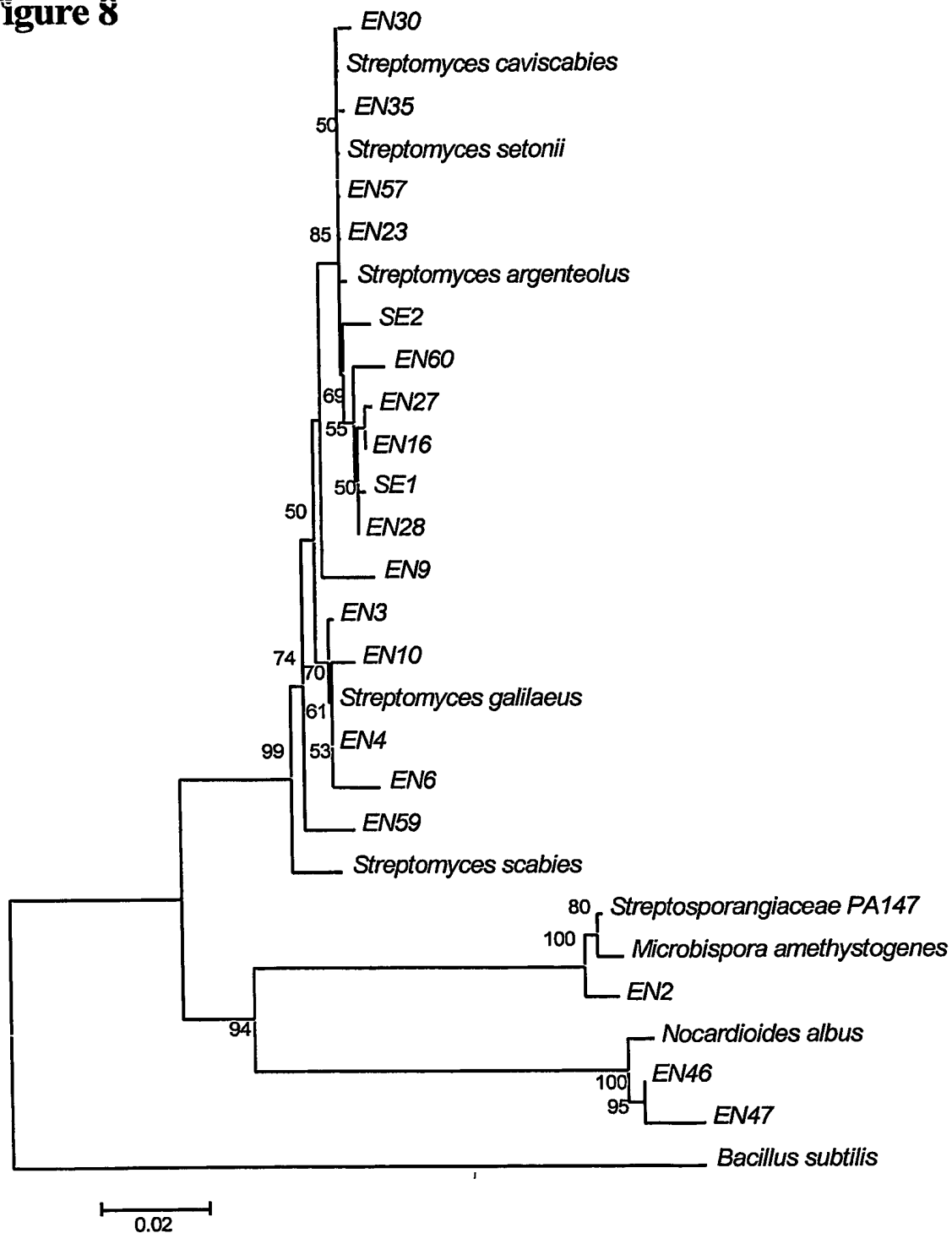
**Figure 6**

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**Figure 7**

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Figure 8



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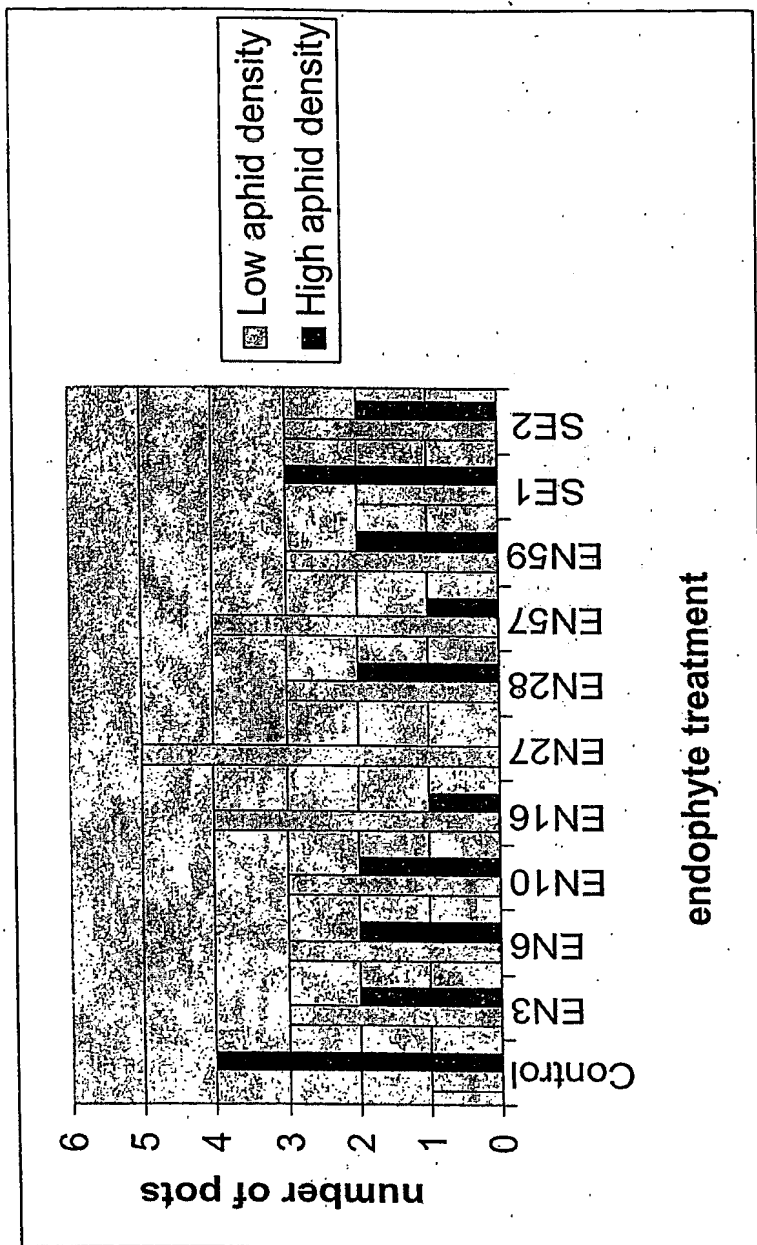
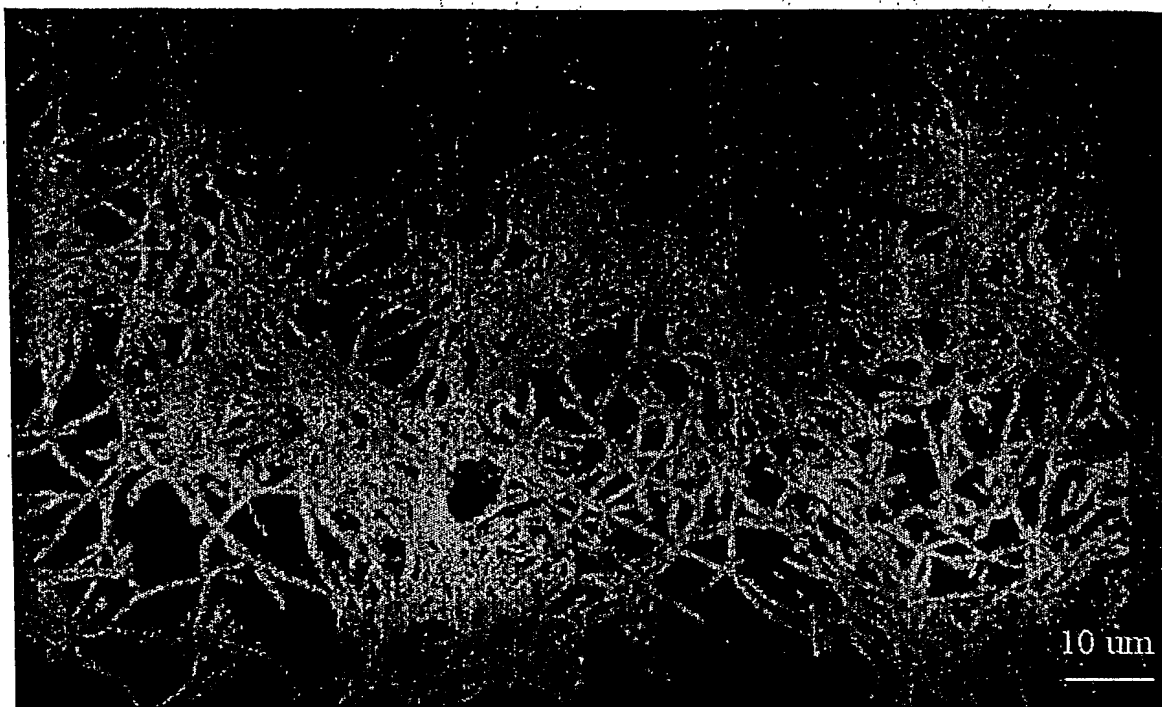


Figure 9



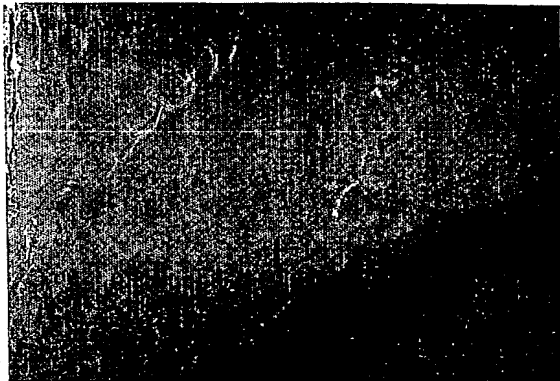
9/30



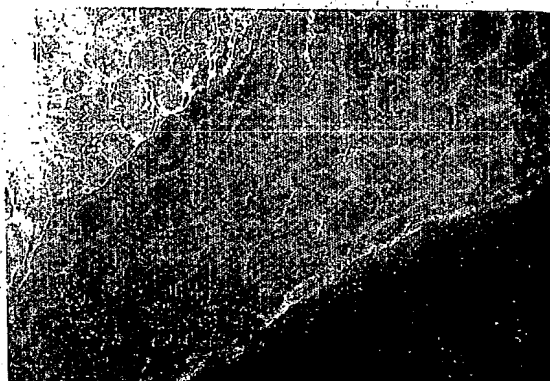
**Figure 10**

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11.1 Blue excitation/ green emission



11.2 UV excitation/ blue emission



11.3 Image enhanced merge

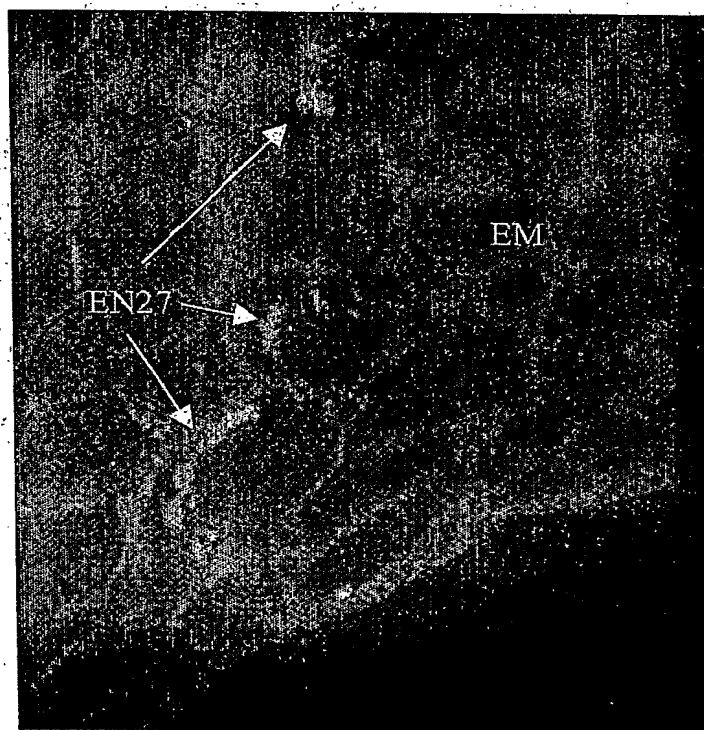
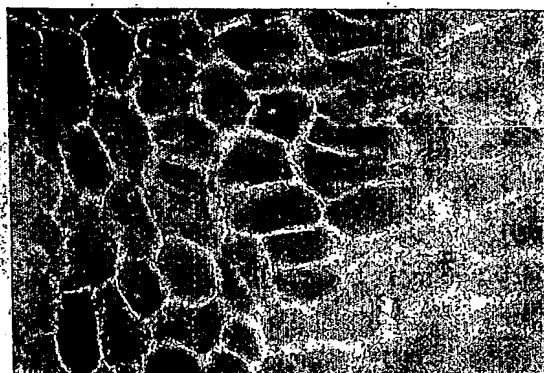
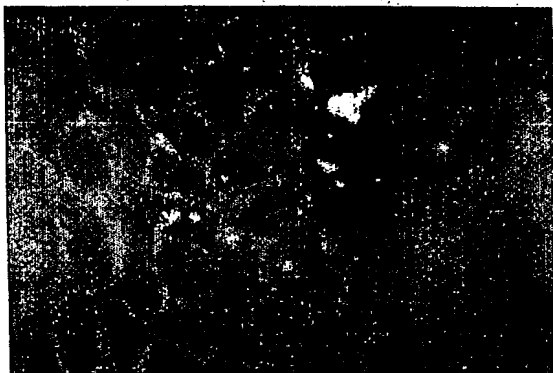


Figure 11

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12.1 Blue excitation/ green emission

12.2 UV excitation/ blue emission



12.3 Image enhanced merge

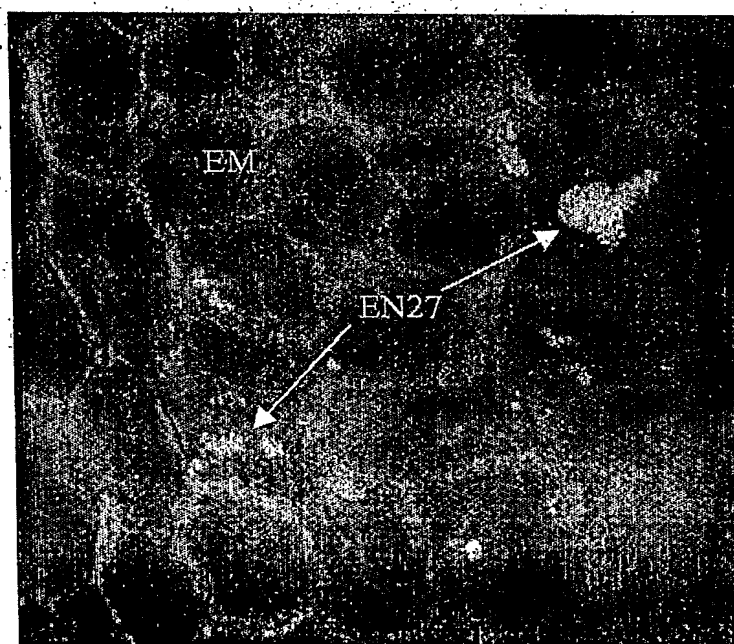
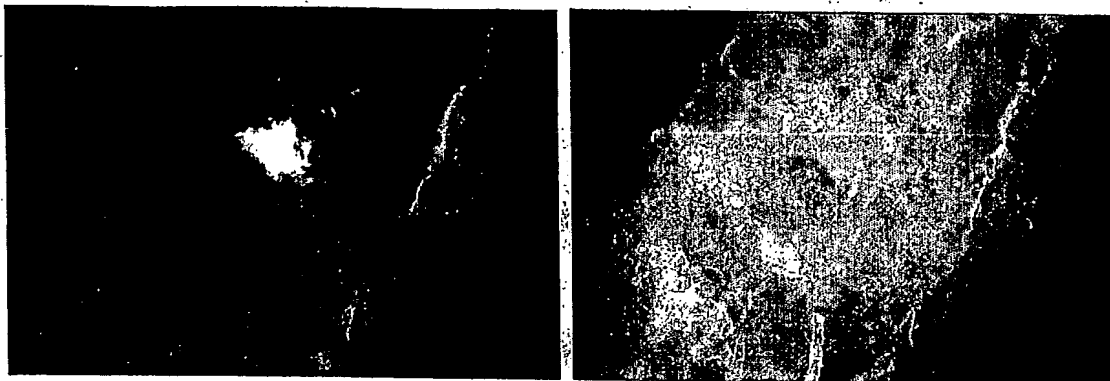


Figure 12

12/30

13.1 Blue excitation/ green emission

13.2 UV excitation/ blue emission



13.3 Image enhanced merge

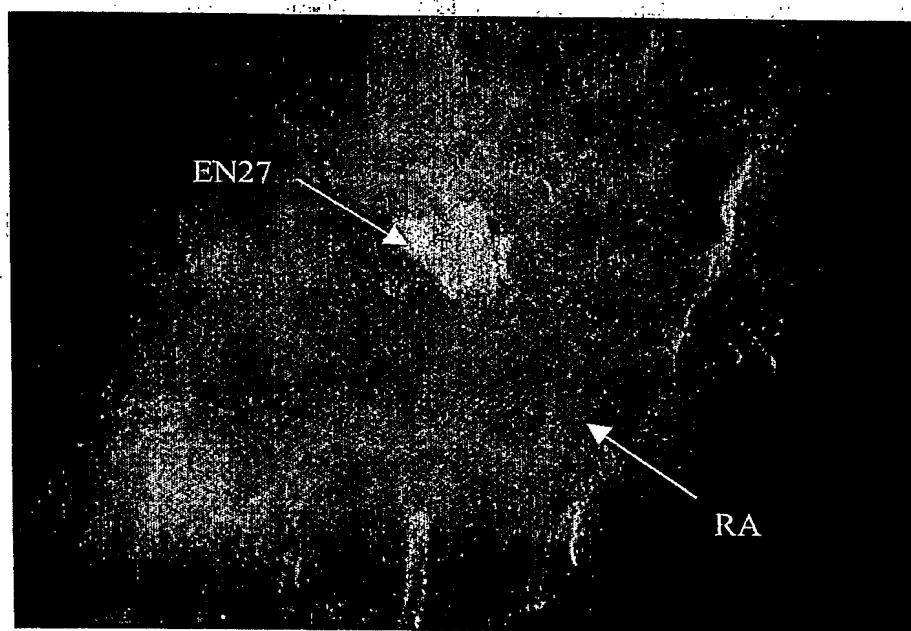
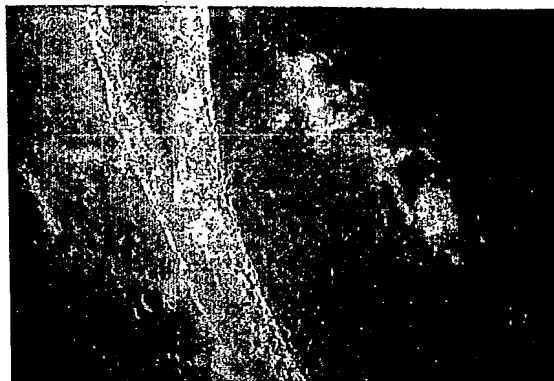


Figure 13

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14.1 Blue excitation/ green emission

14.2 UV excitation/ blue emission



14.3 Image enhanced merge

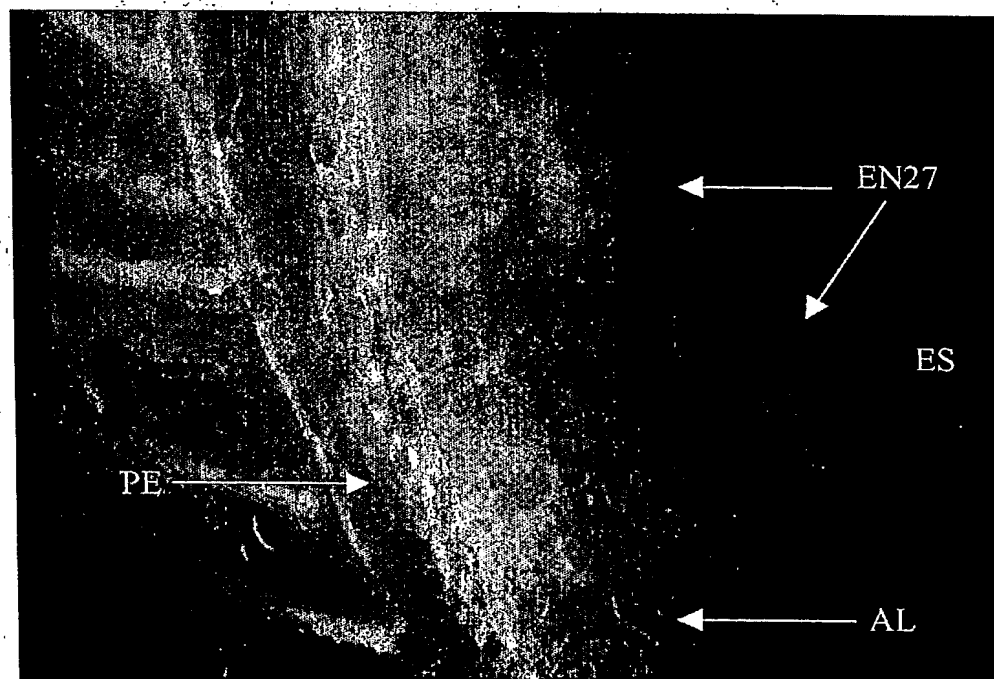


Figure 14

## FIGURE 15

## EN2

## SEQ ID NO:1

CTTAACACATGCAANTCAAGCGGAAAGGCCCTTCGGGGTACTCAANCGGCNAACGGGTGATTAAACACNTGANTAA  
CCTGCCCCCTGACTCTGGGATAANCCCTGGGAAACTGGGTCTAATACCGGATACAACCATTTCTCNCATGGGATGGT  
GGTGGAANTTTTTNCGGTTGGGGATGGGCTCGCGGCCATCACCTTGTGGTGGGGTGATGGCCTACCAAGGCg  
ACgAACGGTAgCCCGCTGAgAGGGCgACCGGCCaCaCTGGGACTGAgACaCCGCCgAACTCCTaCgGGAGGCA  
gCACTgGGGAATaTTGCCCATGGGCGGAAGCCTGACGCAGNGACGCCGCGTGGGGGATGACGGCCTTNGGGTTGT  
AAACCTNTTTTCAGCAGGGACGAAGTTGACGTGTACCTGTAGAAGAAGCGCCGGCTAAATANGTGCCAGCAGCCGC  
GGTAATANGTAGGGCGCGAGCGTTNTCCGGAATTATTGGGCGTAAAGAGTTTGTAGGTGGCTTGTGCGTTTGCC  
GTGAAAGCCCGTGGCTTAANTACGGGTTTGCCTGGATACGGGCAGGCTAGAGGCTGGTAGGGGCAAGCGGAATT  
CCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGCTTGTGGGCCAgTTcTGA  
CGGTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGTTGGGCGCTA  
GGTGTGGGGTCTTCCACGATCTCTGTGCCGTAGCTAACGCATTAAGCGCCCCGCTGGGGAGTACGGCCGCAAG  
GCTAAACTCAAAGGAATTGACGGGGGCCCGCACAAAGCGGCGGAGCATGTTGCTTAATTCGACGCAACGCGAAGA  
ACCTTACCAAGGTTTGACATACACCGGAAACACTCANANATGGGTGCCTCCTTTGGACTGGTGTACAGGTGGTGC  
ATGGCTGTNNCACCTCGTGTCTGNAGATGTNGGGTTAAGTCCCGCAACGANCGCAACCCTTGGTTCCATGTTG  
CCAGCACNCCCTTTGNGGTGGTGGGGACNCATGGGANAATGCCGGGGTCNACTCNGGAGGAAGGTGGGGATGACG  
TCAAGTNATCNTGCCCCCTATGTTCTTGNNGTG

## EN3

## SEQ ID NO:2

GCTGGCGGCGTGCTTAACACATGCAAGTCGAACGATGAACCACTTCGGTGGGGATTAGTGGCGAACGGGTGAGTA  
ACACGTGGGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTAATACCGGATAACACTNCTGCTC  
TCATGGGCGAGGGTTAAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCTATCAGCTTGTGGTGAGGTAATGGC  
TCACCAAGGCGACGACGGGTAGCCGGCTGAGAGGGCGACCGCCACACTGGGACTGAGACACGGCCAGACTCC  
TACGGGAGGCGAGCAGTGGGGAATATTGCaCAATGGGCGAAAGCCTGATGCAGCGACGCGCGTGAGGGATGACG  
GCCTTCGGGTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAAC  
TACGTGCCAGCAGCCGCGGTAATACGTAgGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTtGTAgGC  
GGCTTGTACGTGCGGTGTGAAAGCCCGGGCTTAACCCcGGGTCTGCATTCGATACGGGCTAgCTAgAGTGTGG  
TAGGGGAGATCGGAATTCcTGGTGTAGCGGTGAAATGCgCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGaT  
cTcTGGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCC  
GTAAACGGTGGGAAGTGGTGTGGCGACATTCCACGTCTGCGTGCCGCAGCTAACGCATTAAGTTCCCCGCCT  
GGGGAGTACGGCCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCGCACAAAGCAGCGGAGCATGTGGCTTAA  
TTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATACACCGGAAAGCATCAGAGATGGTGCCCCCTTGTGG  
TtCGGTGTACAGGTGGTGCATGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCA  
ACCCTTGTCTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGACCGCGGGGTCAACTCGGAG  
GAAGGTGGGGACGACGTCAAGTCATCATGCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGcCGGTACAAA  
GAGCTGCGATACCGTGAGGTGGAGCGAATCTCAAAAAGCCGCTCTCAgTTCGGATTGGGGTcTGCAACTCGAcCC  
CATGAAGTCGGAGTTGcTAATAATCgCANATCAgCATTGCTGCGGTGAATACGTTcCCGGGCTTGTACAcACCG  
CCcGTCACGTcACGAAAGTCGgTAAcACCcGAAgCCGGTGGCCAACCCCTTgTGGGAGGgAGCTGTGCAAGGTGG  
GACTGGCGATTG

**[FIGURE 15 CONTINUED]****EN16****SEQ ID NO: 7**

GCTTNTTGGTGGGNCNATGGCCTACCAAGGNGAGGACGGNTANCCNGCCTGNGAGGGAGACCGNCCACACTGGGA  
ATGNGANACGGCCAGAATCCTACGGGAGGCAGCANNGGGGAANATTGCACAANGGGCGAAAGCCTGATGCAGNG  
ANGCCGCGTGAGGGAAGACGGCCTTTGGGTTGTAAACCTNTTTNAGCAGGGAAGAAGCGAAAGTGACGGTACCTG  
CAGAAGAAGCGCCGGCTAANTANGTGCCAGCAGCCGCGTAATANGTAGGGCGCAAGCGTTGTCCGGAATTATTG  
GGCGTAAAGAGCTTGTAGGCGGCTTGTGANGTNGGATGTGAAAGCCCGGGGCTTAACCECGGGTTTGCATTTGAT  
ACGGGCTAGCTAGAGTGTGGTAGGGGAGATNGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAA  
CACCGGTGGCGAAGGCGGATCTCTGGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAG  
ATACCCTGGTAGTCCACGCCGTAAACGTTGGGAAC TAGGTGTTGGCGACATTCCACGTCGTCGGTGCCGCAGCTA  
ACGCATTAAAGTTCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCCGCACAAG  
CAGCGGAGCATGTGGCTTAATTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATATACCGGAAAGCATCAG  
AGATGGTGCCCCCTTGTGGTCGGTATACAGGTGGTGCATGGCTGTCGTGAGCTCGTGTGAGATGTTGGGTT  
AAGTCCCGCAACGAGCGCAACCCCTTGTCTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGAC  
TGGGGGTCTGNAACTCGACCCCATGAANTCGGAGTTGCTAATAATCCCAAATTCANCATTGGTGCGGTGAATACT  
TCCCGGGCCTGGTACACNACCGCCCGTCAACTCACGAAAGTCGGTNAAACCCGAAACCGGTGGGCCAACCCCTTG  
TGGGAAGGAAC TGCCNAAGTGGGACTGGCGATTGGGAC

**EN23****SEQ ID NO: 10**

ACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGATGAAGCCGCTTCGGTGGTGGATTAGTGGCGAACG  
GGTGAGTAACACGTGGGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTAATACCGGATAACAC  
TCTGTCCCGCATGGGACGGGGTTGAAAGCTCCGGCGGTGAAGGATGAGCCCGCGCCTATCAGCTTGTGGTGGG  
GTAATGGCCTACCAAGGCGACGACGGGTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCC  
CAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGG  
GATGACGGCCTTCGGGTTGTAAACCTCTTTTCAGCAGGGAAGAAGCGAAAGTGACGCTACCTGCAGAAGAAGCGCC  
GGCTAACTACGTGCCAGCAGCCGCGGTAAACGTAAGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCT  
CGTAGGCGGCTTGTACGTCGGATGTGAAAGCCCGGGGCTTAACCCCGGGTCTGCATTTCGATACGGGCTAgCTAG  
AGTGTGGTAGGGGAGATCGGAATTCCTGGTGTAgCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAA  
GGCGGATCTCTGGGCCATTACTGACgTcTGAGGAGCGAAAGCGTGGGgAgCGAACAGGATTAGATACCCTGgTAG  
TCCACGCCGTAAACGTTGGgAACTAGgTGTTGGCGACATTCCACGTCGTCGGTGCCGCAGCTAACGCATTAAGTT  
CCCCGCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCAGCGGAGCATG  
TGGCTTAATTGACGCAACGCGAAGAACCTTACCAAGGCTTGACATATACCGGAAAGCATCAGAGATGGTGCCCC  
CCTTGTGGTCGGTATACAGGTGGTGCATGGCTGTCGTGAGCTCGTGTGAGATGTTGGGTAAAGTCCCGCAAC  
GAGCGCAACCCCTTGTCTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGACTGCCGGGGTCAA  
CTCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCG  
GTACAATGAGCTGCGATGCCGCGAGGCGGAGCGAATCTCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAAC  
TCGACCCCATGAAGTCGGAGTTGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTA  
CACACCGCCCGTCACGTCACGAAAGTCGGTAACACCCGAAGCCGGTGGCCCAACCCCTTGTGGGAGGGAGCTGTG  
AAGGTGGGACTGGCGATTG

**[FIGURE 15 CONTINUED]**

EN27

SEQ ID NO:12

TTAANACATGCAANTCGAACGATGAACCCNGTTTCGGTGGTGGATTAGTGGCGAACGGTGAGTAANANGTGGGCA  
ATTTGCCCTTCATTTTGGACAAGCCCTGGAAACGGGTTTAATACCGGATAACATTTTNTCCCGCATGGGANGGGG  
TTGAAAGNTCCGGCGGTGAAGGATGAGCCCGCGGCCATNAGCTTGTTGGTGGGGTAATGGCCTACCCAAGGGAG  
ACGGGTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGAATGAGANACGGCCCAGAATCCTACGGGAGGCAGCA  
GTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGANGCCGCGTGAGGGATGACGGCCTTNGGGTTGTAA  
ACCTTTTTNAGCAGGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAAATAAGTGCCAGCAGCC  
GCGGTAATAAGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTTGTTAGGCGGCTTGTCANGTNGG  
ATGTGAAAGCCCGGGGNTTAACCCCGGGTTTGCATTTGATACGGGCTAGNTAGAGTGTTGGTAGGGGAGATNGGAA  
TTCCTGGTGTTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGATCTCTGGGCCATTACT  
GACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGTTGGGAAC  
TAGGTGTTGGCGACATTCCACGTCGTCGGTGCCGCAGCTAACGCATTAAGTTCCCCGNGTGGGGAGTACGGCCGC  
AAGGCTAANACTCAAAGGAATTGACGGGGGCGCCNACAAGCAGCGGANCATGTGGCTTAATTTCGACGCANCGCGA  
AGAACCTTACCAAGGCTTGACATATACCGGAAAGCATCAGAGATGGTGCCCCCTTGTTGGTCGNTATACANGTGG  
TGCATGNCTGTCTCACCTCGTGTCTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCNACCCTTGNTCTGTGTT  
GNCANCATGCCCTTCGGGGNTGATGGGGACTCACAGGANACTGNCCGGGGTCAACTCCGGANGAAGGTGGGTGAC  
GAAGTCAAGGTCATCATGNCCCCTTATGTCTTGGTGCTGCACACGTGC

EN28

SEQ ID NO:13

TTCGGNGGTGGANTAGNGGCGNACGGGNGACCAACANGNGGGCAATCCCCCCTTCANTTTNGGACAACCCCTGGA  
AACGGGTTNTAATACCGGATAACANTTTNTCCCGCATGGGANGGGGTGAAAGCTCCGGCGGTGAAGGATGAGC  
CCGCGGCCATCAGCTTGTTGGTGGGGTAATGGCCTACCAAGGCGACGACGGGTAGCCGGCCTGAGAGGGCGACC  
GGCCACACTGGGANTGAGANACGGCCCAGAATCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAA  
GCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTGTAAACCTTTTTTCAGCAGGGAAGAAGCGAAA  
GTGACGGTACCTGCAGAAGAAGCGCCGGCTAAATANGTGCCAGCAGCCGCGGTAATANGTAGGGCGCAAGCGTTG  
TCCGGAATTATTGGGCGTAAAGAGNTTGTAGGCGGCTTGTCANGTCGGATGTGAAAGCCCGGGGCTTAACCCCGG  
GTTTGCAATTCGATACGGGCTAGCTAGAGTGTTGGTAGGGGAGATCGGAATTCTTGGTGTAGCGGTGAAATGCGCAG  
ATATCAGGAGGAACACCGGTGGCGAAGGCGGATcTcTGGGCCATTACTGACGcTGAGGAGCGAAAGCGTGGGgAG  
CGAACAGgAATTAGATACCCTGgTAGTCCACGCCGTAAACGTTGGgAAcTAGgTGTGGcGACATTCCACGTcGT  
CGgTGCCGCAGCTAACGCATTAAGTTCCCCGCTGGGGAGTACGgCCCGCAAGGCTAAAACTCAAAGGAATTGAC  
GGGGgCCCGCACAAAGCAGCGGAGCATGTGGCTTAATTGACGCAACGCGAAGAACCTTACCAAGGCTTGACATAT  
  
ACCGGAAAGCATCAGAGATGGTGCCCCCTTGTTGGTTCGGTATACAGGTGGTGATGGCTGTCTGTCAGCTCGTGTC  
GTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGgTCTGTGTGgCCAGCATGCCCTTCGGGGTGAT  
GGGGACTCACAGGAGACTGgCCGGGGTCAACTCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCTTATG  
TCTTGGGgCTGCACACGTGCTACAATGGCCGGTACAATGAGCTGCGATGCCGCGAaGGCGGAGCGAATCTCAAAA  
AaGCCGGTCTCAGTTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTTGCTAGTAATCGCAGATCAGC  
ATTGCTGCGGTGAATACGTTCCCGGGCCTTGACACACCGCCCGTCACGTACGAAAGTCGGTAACACCCGAAGC  
CGGTGGTCCAACCCCTTGTTGGGAGGGAGCTGTCGAAGGTGGGACTGGCGATTGG



**[FIGURE 15 CONTINUED]**

EN46

SEQ ID NO:16

ATGCAAGTCGAGCGGAAAGGCCCTTCGGGGTACTCGAGCGGCGAACGGGTGAGTAACACGTGAGTTAATCTGCCC  
CAGGCTCTGGATACCCACCGGAAACGGTGATTAATACCGAATACGACAACCGATTTGCATGATCTGGTgGTGNA  
AAGTTTTTTCGGCTGGGATGTGCTTCGCGGCCCTATCAGCTTGTGGTGAGGTAATGGCTCACCCAAGGCTTCGAC  
GGTAGCCGGCCTGAGAGGGTGACCGNCCACACTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTG  
GGGAATATTGGACAATGGGCGGAAGCCTGATCCAGCAACGCCGCGTGAGGGATGACGGCCTTCGGGTGTAAACC  
TCTTTTCAGCACAGACGAAGCGCAAGTGACGGTATGTGCAGAAGAAGGACCGGCCAACTACGTGCCAGCAGCCGCG  
GTAATACGTAGGGTCCGAGCGTTGTCCGGAATTATTGGGCGTAAAGGGCTCGTAGGCGGTCTGTGCGCTCGGGAG  
TGAAAACAGGTGCTTAACACCTGGCCTGCTTTTCGATACGGGCAGNCTAGAGGTACNCAGGGGAGAATGGAATTC  
CTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAAACACCGGTGGCGAAGNCGGTTCTCTGGGAGTATCCTGA  
CGCTGAGGAGCGAAAGTGTGGGGAGCGAACAGGATTAGATACCCCTGGTAGTCCACACCGTAAACGTTGGGCGCTA  
GGTGTGGGACACATTCCACGTGTTCCGTGCCGCGAGCTAACGCATTAANCGCCCCGCTGGGGAGTACGGCCGCAA  
NGCTAAAACTCANAGGAATTGACGGGGGCGCACAAGCGGCGGAgCATGCGGATTAATTCGATGCAACGCGAAG  
AACCTTACCTGGGTTTGACATACACCGGAAAGCCGTACAGATACGGCCCCCTTTAGTCgGTGTaCAGGTGGTGCA  
TGGCTGTCTgCAGtCgCTGTCTGTGAGATGTTcCGGGTTAAGTCCCGCAACGAGCGCAaCCCTCgTCCTATGTTGC  
CaGCAATTTCGGTTGgGGACTCATAGGAgACTGCCgGGGTCaACTCGGAGGAAGGTGGGGATGACGTCAAGTCATC  
ATGCCCCCTATGTCCAGGGCTTCACGCATGCTACAATGGCCGGTACAAAGGGCTGCGATCCCCTGAGGGTGAGCG  
AATCCCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAATCG  
CAGATCAGCAACGCTGCGGTGAATACGTTCCCGGGCCTTGTAACACCGCCCCGTACGTCACGAAAGTCGGCAAC  
ACCCGAAGCCANTGGCCCAACTCGTAAGAGAGGGAGCTGT

EN60

SEQ ID NO:18

ATGCAAGTNGAACGATGAANCCNTTTGGGGTGGATTAGTGGCGAACGGGTGAGTAANANGTGGGCAATTTGCCCT  
TCAATTTGGGACAAGCCCTGGAAACGGGGTNTAATACCGGATAACANTNTGTCCCGCATGGGACGGGGTTAAAAG  
CTCCGGCGGTGAAGGATGAGCCCGCGGCCTATNAGCTTGTGGTGGGGTGATGGCCTACCAAGGCGACGACGGGT  
AGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGG  
AATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTGTAAACCTTT  
TTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAAATANGTGCCAGCAGCCGCGGTA  
ATANGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGTTTGTAGGCGGCTTGTACGTNGGATGTGA  
AAGCCCGGGGCTTAACCCGGGTTTGCATTGATACGGGCTAGCTAGAGTGTGGTAGGGGAGATCGGAATTCCTG  
GTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGaTcTcTGGGCCATTACTGACGNT  
GAGGAGCGAAAGCGTGGGGAGCNAACAGNATTAGATACCCCTGGTAGTCCAAGCCGTAAACGTTGGGAACANGTG  
TTGGCGACATTCACGTGTCNNTGCCGCANCTAACGCATTAAGTTCCCCGCTGGGGAGTACGGCCGCAAGGCT  
AANACTCAAAGGAATTGANGNNGGCCCCGACAAGCAGCGGAGCATGTGGCTTANTTCNACGCANCGCGAAGAACC  
TTACCAAGGTTTGGCATATAcCGGAAAgCaTCAGAgATgGTCCCCCCTtGTGGTCGGTATACAGgTGGTGCNTG  
GCTGTCTGTCAGCTCGTGTCTGTGACAtGTTGGTTAAgTCCCGTCAaCGAGgCGCAACCCTTGTTNTGTGTNGCCAG  
CATGCCCTTCGGGGTGATGGGGACTCACAGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGGGACGACGTCAAG  
TCATCATGCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCGGTACAATGAGCTGCGATGCCCGGAGGCG  
GAGCGAATCTCAAAAAGCCGGTNTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTTGCTAGT  
AATCGCAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTAACACCGCCCCGTACGTCACGAAAGTCG  
GTAACACCCGAAGCCGNTGG

**[FIGURE 15 CONTINUED]****PM87****SEQ ID NO:24**

GGCCCAGANATCCGNCTTCGCCACCGGTGTTCCCTCCTGAATATCTGCGCATTTACCGCTACACCAGGAATTCCG  
ATCTCCCCTACCACACTCTAACTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGGGCTTTCACATCCGAC  
GTGACAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCGGGACAACGCTTGCGCCCTACGTATTACCGCGGCTG  
CTGGCACGTAATTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTGCTTCTTCCCTGCTGAAAGAGGTTTACA  
ACCCGAAGGCCGTCATCCCTCACGCGGCGTCGCTGCATCAGGCTTTGCCCCATTGTGCAATATTCCCCACTGCTG  
NCTCCCGTANGAGTCTGGGCCGTGTCTCAGTCCCAGTGTGGCCGGTCGNCCTCTCAGGCCGGCTACCGTCGTGCG  
CTTGGTAGGCCATTACCCACCAACAAGCTGATANGCCGNGGGCTCATCCTTCANCGTCGGAGCTTCAANCCCG  
TCCATGCGGGACAGAGTGTATCCGGTATTANACCCCGTNTCAGGGCTTGTCANAGTGAAGGGCAGATNGCCAC  
GTGTTATCACCGTTCGCCACTAATNACANCGAACGGCTTATCGTNCGACTGCATGTGTTAACACNCGCAGCGTT  
CGTCCTGAGCCAG

## FIGURE 16

## EN5

## SEQ ID NO:3

GTAATGGCCCANAAAAACCGCCTTCGCCACCGGTGTTCTCCTGATATCTGCGCATTTACCGCTACACCAGGAAT  
TCCNATCTCCCCTACCACACTCTAGCTAGCCCGTATCNAATGCAAACCTCGGGGTTAAGCCCCNAGCTTTCACATC  
CGACGTGACAAGCCGCCTACAANCTCTTTACGCCCAATAATTCCGGANAACGCTCGCACCCCTACNTNTTACCGCG  
GCTGCTGGCNCGTNTTTAGCCGGTGCTTCTTCTGCAGGTACCGTCACTTTCGCTTCTTCCCTGCTNAAAAAGGTT  
TACAACCCTANGGCCGT

## EN6

## SEQ ID NO:4

TGAGGGATGACGGCNTTCGGGGTTGTAAACNTTNTCACCAGGGAAGAAGCGAAAGTGNCGGTACCTGCAGAAGA  
AGCGCCGNTAACTACGGGCCAGCATCCGCGGTAATACGTAGGGCGCAATCGTTGTCCGGAATTANTGGGCGTAA  
AGAGNTCGTAGGCGGCTTATCACGTCGGGTGTGAAAGCCCGGGGCTTAAGCCCCGGGTCTGCATTCGATACGGGC  
TAGCTAGANTNTGNTAGGGGAGATCGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGgAGGAACACCGg  
TGGCGAAGGCGGATCTcTGGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCC  
TGGTAGTCCACGCCGTAAACGGTGGGAACCTAGGTGTTGGCGACATTCCACGTCGTCGGTGCCGACGCTAACGCAT  
TAAGTTCGCCGCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAAGCAGCGG  
AGCATGTGGCTTAATTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATACACCGGAAAGCATCAGAGATGG  
TGCCCCCCTTGTGGTGGTGTACAGGTGGTGCATGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCC  
CGCAACGAGCGCAACCCCTTGGTTCGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGAACGCCG  
GGGTCAACTCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCTTATGTCTTGGGCTGCACACGTGCTACA  
ATGGCAGGTAAATGAGCTGCGATACCGTGAGGTGGAGCGAATCTCAAAAAGCCTGTCTCANTTCGGATTGGGGT  
CTGNAANTCGACCCCATGAAAGTCGGAGTTGCTAATTATCCCAGATCAACATTGCTGGCGGTGAATACGTTCCCG  
GGGCCTTGTTAAACACCGCCCGTCAANGTNAAGAAAGTCGGGTAACACCCGAAANCCGGTGGGCCAANCCCT

## EN7

## SEQ ID NO:5

CCGCCTTCGCCACCGGGTGTTCCTCCTGATATCTGCGCATTTACCGCTACACCAGGAAATTCCNATCTCCCCTA  
CCACACTCTANCTANCCCGTATCGAATGCAAAACCCGGGGTTAANCCCCGGGCTTTCACACCCGACNTGACAAGCC  
GCCTACAAACTCTTTACGCCCAATAATTCCGGACAACGCTTGCGCCCTACNTATTACCGCGGTGCTGGCACNTA  
TTAGCCGCGCCTTCTTCTGCAGGTACCGTCACTTTCGCTTCTTCCCTGCTGAAAAAGGTTTACAACCCGAAGGC  
CGTCATCCCTCAGCGGGCGTGCCTGCATCAGGCTTTCGCCCATTGTGCAATATTCCCACCTGCTGCCTCCCNTAG  
GAATCTGGGCGGTGTCTCAATCCAGTGTGGCCGCTCCCTCTCNGGCCGGCTACCGTCNTCCCTTGGTNACCATT  
ANCTCACCAACAACCTGATAGNCGCGGGCTCATCTTCACGCGGGAACCTTCAACCACC

## EN9

## SEQ ID NO:6

GGCGGCGTGCTTAACACATGCAAGTCGAACGATGAAGCCCTTCGGGGTGGATTAGTGGCGAACGGGTGAGTAACA  
CGTGGGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTAATACCGGATACGATTTCGgGAGGCAT  
CTCCTGGTaCTGGAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCcTATCAGCTTGTGTGGGTAATGGCCTACC  
AAGGCGACGACGGgTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGGCCAGACTCCTACGG  
GAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCTGAGGGATGACGGCCTTC  
GGGTTGTAAACCTCTTTCAGCAGGGAAGAAGCGAGAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACTACGTG  
CCAGCAGCCGCGTAATACGTAGGGCGCAAGCGTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGCGGCTTG  
TCACGTCCGGGTGTGAAAGCCCGGGGCTTAACCCCGGGTCTGCATCCGATACGGGCAGGCTAGAGTGTGGTAGGGG  
AGATCGGAATTCTTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGATCTCTGG  
GCCATTACTGACGCTGAGGAgCgAAAGCGTGGGGAGCCaACAGGATTAGATACCCTGGTAGTCCACGCCGTAAC  
GTTGGAAGTGGTGTGGCGACATTCCACGTCGTCGGTGCCGACGCTAACGCATTAAGTTCGCCGcTGGGGAGT  
ACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCGACAAAGCAGCGGAGCATGTGGCTTAATTGACG  
CAACGCGAAGAACCTTACCAAGGCTTGACATATACCGGAAAGCGCCAGAGATGGTGCCCCCTTGTGGTGGTAT  
ACAGGTGGTGCATGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTGT

**[FIGURE 16 CONTINUED]**

CCTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGACCGCCGGGTCAACTCGGAGGAAGGTGG  
GGACGACGTCAAGTCATCATGCCCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCGGTACAAAGAGCTGCG  
ATGCCGTGAGGCGGAGCGAATCTCAAAAAGCCGGTCTCAGTTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGT  
CGGAGTTGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGACACACCGCCCGTCA  
GTCACGAAAGTCGGTAACACCCGAAGCCGGTGGCCCAACCCCTCGGGGAGGAGCTGTCTGAAGGTGGGAC

**EN17****SEQ ID NO: 8**

CCGCCTTCGCCACCGGTGTTCTCCTGATATCTGCGCATTTACCGCTACACCAGGAATTC  
NATCTCCCCTACCACACTCTAGCTAGCCCGTATCAAATGCAAACCCGGGGTTAAGCCCCGGGCTTTC  
ACATCCNACGTGACAAGCCGCCTACAANCTCTTTACGCCCAATAATTCCGGACAACGCTTTCGCCCT  
ACNTATTACCGCGGCTGCTGGCACNTATTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTTCGCT  
NCTTCCCTGCTGAAANAGGTTTACAACCCAAAGGCCNTCATCCCTCNCGGGNTCNTTGCNTCNGGC  
TTNCNCCCATTGTTCAANNNTCCCCACTGCTNCCTCCCCTCGGAATCTGGGCCGNTGTCTCATTCCCN  
TTNTGGCCGGTCCCCCTCNCAGGCCNGCTACCC

**EN19****SEQ ID NO: 9**

CTCAGCGTCNGTAATGGCCCCAAAAACCGCCTTCGCCACCGGTGTTCTCCTGATATCTGCGCATTTACCGCTAC  
ACCAGGAATTCCNATCTCCCCTACCACACTCTAGCTAGCCCGTATCNAATGCAAACCCGGGGTTAANCCCCGGGC  
TTTCACATCCNACNTGACAAGCCGCCTACAANCTCTTTACGCCCAATAATTCCGGACAACGCTTGCNCCCTACTT  
ATTACCGCGGCTGCTGGCACTTATTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTTCGCTTCTTCCCTGCTN  
AAAAAGGTTTACAACCCNAAGGCCGTCATCCCTCAGCGGGCNTCGCTGCATCAGGCTTTCNCCCATTGTGCAATA  
TTCCCCACTGCTGCCTCCCGTAGGATTCTGGGCCGNTCTCATTTCCANTGTGGCCGGTGCCTCTCAGGCCGG  
CTACCCGTCNTCNCCTTGGTAGGCCATTACCCACCAACAAGCTNATAGGCCGCGGGCTCATCCTTCACCGCCGG  
AAGCTTTC AACCCNTCCATGCGGGANAAATTGTTNTCCGGTATTAAACCCCGTTTCCAGGGNTGTCCCAAAT  
TGAAGGGGGATTGNCCACTTTTACTCACCGGTTTCNCNCTAATCCACCACC

**EN26****SEQ ID NO: 11**

CCGCCTTCGCCACCGGTGTTCTCCTGATATCTGCGCATTTACCGCTACACCAGGAATTCCNATCTCCCCTACC  
GAACTCTANCTGCCCCGTATCNACTGCAAACCCGGGGTTAAGCCCCGGGCTTTCACAAACCGACNTGACAAGCCGC  
CTACAANCTCTTTACNCCCAATAATTCCGGACAACGCTTTCGCCCTACNTATTACCGCGGCTGCTGGCACNTATT  
TAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTTCGCTTCTTCCCTGCTGAAAAAGGTTTACAACCCGAAGGCCG  
TCNTCCCTCAGCGGGCTGCTGCATCAGGCTTTCGCCCATTTGTGCAATATTCCCCACTGCTGCCTCCCGTAGGA  
TTCTGGGCCGTGTCTCANTCCANTNTGGCCGGTCCCTCTCAGGCCGNTACCCGTCGTCCTTGGTGAACNC  
TACCTCNCCAACAANCTGATAGGGCGCGGGCTCANCNTGCACGCCGGANCTTT

**EN35****SEQ ID NO: 14**

AACACATGCAAGTCGAACGATGAAGCCGCTTCGGTGGTGGATTAGTGGCGAaCGGGTGA<sub>g</sub>TAACACGtGGCCAAN  
TGTGNCCGTCACTaTGGGAC<sub>g</sub>AAGaCCTTGGAACGGGGTCTAATACCGGATAACACTCTGTCCCGCATGGGACG  
GGTTGAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCTATCAGCTTGTGGTGGGGTAATGGCCTACCAAGGC  
GACGACGGGTAGCCGGCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCAGACTCCTACGGGAGGC  
AGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTT  
GTAAACCTCTTTACGAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACTACGTGCCAGC  
AGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGCGGCTTGTACG  
TCGGATGTGAAAGCCCCGGGGCTTAACCCCGGCTCTGCATTGCATACGGGCTAGCTAGAGTGTGGTAGGGGAGATC  
GGAATTCTTGGTGTAGCGGTGAAATGCGCAGATATTAGGAGGAACACCGGTGGCGAAGGCGGATCTCTGGGCCA  
TTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTATATACCCTGGTAGTCCACGCCGTAAACGTTG  
GGAAGTGGTGTGGGACATTCCACGTCGTCGGTGCCGAGCTAACGCATTAAAGTTCCCCGCCTGGGGAGTACG  
GCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCGCACAAGCAGCGGAGCATGTGGCTTAATTCGACGCAA  
CGCGAAGAACCTTACCAAGGCTTGACATATACCGGAAAGCATCA<sub>g</sub>AGATGGTGGCCCCCTTGTGGTGGTATACA

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## [FIGURE 16 CONTINUED]

GGTGGTGCATGGCTGTCGTCANCTCGTGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTTGTTCCT  
GTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGACTGCCGgGGTCAaCTCGGAGGAAGGTGGGGA  
CGACgTCaAGTCATCATGCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCGCTACAATGACCTGCgATG  
CCGCGgAGGCgGACCGAATCTCAaACAAGCCCGTCTCATTCCGATTGCGGTCTGCaActcCGACCCCATgAAgTCC  
GACTtGCTAgTACTCGCACgTCAACaTtGCTGCGCTGaATACgTCCCCGGGCCTTGTACACACCGCCCGTCACGT  
CACGAAAGTCGGTAACACCCGAAGCCGGTGGNCCAACCCCTTGTGGGAGGGAGCTGTGCGAA

EN39

SEQ ID NO:15

ccgccttcgccaccggtgttcctcctgatatactgcgcatttcaccgctacaccaggaattccnatctccccctacc  
acactctagctancccggtatcnaatgcaaaccggggttaacccccgggctttcacacccnactnacaanccgc  
ctacaaactctttacgccaataattccggacaacgcttgccgctacttattaccgcggtgctggcacttatt  
tagccggcgcttcttctgcaggtaccgtcactttcgttcttccctgctgaaaaaggtttacaacccgaaggcng  
tcatccctcaacggcgctcgtgcacaggtttcgcctattgtgcaatattccccactgctgcctcccgtagna  
ntctggggcgctntctcantcccagtggtgncggctgcctctcaggccgggctaccgctgctcncctnggtnaacc  
attanntcaccaacaagctgataggccggggtcatccttcaccgcggagcttttaacccctgcccataaaaa  
cagangtnttatccggtattanaacccgtttccaggg

EN57

SEQ ID NO:17

GTGCTTAACACATGCAAGTCGAACGATGAAGCCGCTTCGGTGGTGGATTAGTGGCGAACGGGTGAGTAACACGTG  
GGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTAATACCGGATAACACTCTGTCCCGCATGGG  
ACGGGGTTGAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCCTATCAGCTTGTGGTGGGTAATGGCCTACCAAG  
GCGACGACGGGTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCAGACTCCTACGGGAG  
GCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCTGAGGGATGACGGCCTTCGGG  
TTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACTACGTGCCA  
GCAGCCGCGGTAAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGCGGCTTGTCA  
CGTCGGATGTGAAAGCCCGGGGCTTAACCCCGGGTCTGCATTTCGATACGGGCTAGCTAGAGTGTGGTAGGGGAGA  
TCGGAATTCTTGGTGTAGCGGTGAAATGCGCAGATATNCAGGAGGAACACCGGTGGCGAAGGCGGATCTCTGGCC  
ATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCCTGGTAGTCCACGCCGTAAACGTT  
GGGAAC TAGGTGTTGGCGACATTCCACGTCTGCGGTGCCGACGTgAACGCATTAAGTTCCCCGCCTGGGGAGTA  
CGGCCGCAAGGCTAAAAC TCAAAGGAATTGACGGGGGCCCCGACAAAGCAGCGGAGCATGTGGCTTAATTCGACGC  
AACGCGAAGAACCTTACCAAGGCTTGACATATACCGGAAAGCATCAGAGATGGTGCCCCCTTGTGGTGGGTATA  
CAGGTGGTGCATGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTTGT  
CTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAgACTGcCGGGGTCAACTCGGAGGAAGGTGGG  
GACGACGTCAAGTCATCATGCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCGGTACAATGAGCTGCGA  
TGCCgCGAgGCGGAgCgAATCTCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTC  
GGAgTTGCTAgTAATCgCAGATCAGCATTGCTGcGGTGAATACGTTCCCGGGCCTTGTACACACCGCCGTCAcGT  
CACGAAAGTCGGTaACACCCGAAGCCGGTGGCCCAACCgCCTTGTGGGAgGGAACCTTTCCA

## FIGURE 17

## SE1

## SEQ ID NO:19

GAACGATGAAGCCGTTTCGGTGGTGGATTAGTGGCGAACGGTGAGTAAAAGTGGCAATTTNCCCTTCATTTTGGAC  
CAAGCCCTGGAAACGGGTTTAAANACCGGATAACATTNTGTCCCGCATGGGACGGGGTTGAAAGNTCCCGGCGGTG  
AAGGATGAGCCCGCGGCTATCAGCTTGTGGTGGGGTAATGGCCTACCAAGGCGACGACGGGTAGCCGGCCTGA  
GAGGCGACCGGCCACACTGGGANTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACA  
ATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTTGTAAACCTNTTTCAGCAGGGA  
AGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAAATANGTGCCAGCAGCCGCGGTAATANGTAGGGC  
GCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTTGTAGGCGGCTTGTGANGTCGGATGTGAAAAGCCCGGGC  
TTAACCCCGGGTTTGCATTTCGATACGGGCTAGTTAGAGTGTGGTAGGGGAGATNGGAATTCCTGGTGTAGCGGTG  
AAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGATCTCTGGGCCATTACTGACGCTGAGGAGCGAAA  
GCGTGGGGAGCNAACAGGATTAGATACCTGGTAGTCCACGCCGTAAACGTTGGGAAGTAGGTGTGGCGACATT  
CCACGTCGTGGTGCCGAGCTAACGCATTAAGTTCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAGCTCAAAG  
GAATTGACGGGGGGCCCGACAAGCAGCGGAGCATGTGGCTTAATTGACGCAACGCGAACAACCTTACCAAGGCT  
TGACATATACCGGAAAGCATCANAGATGGTGCCCCCTTGTGGTTCGGTATACANGTGGTGCATGGCTGTCGTGAG  
CTCGTGTGTCGTGAGATGTTGGGTTANGTCCCGCAACGAGCGCNACCCTTGTTCGTGTCGNCNAGCATGCCCTTCG  
NGGTGATGGGACTCACANGAGACTGNCGGGGTCCACTCGGAGGAAGGTGGCGACNACGTCANNTCATCATGCC  
CCTTATGTCTTGGGNTGGCCACGTGCNACNATGGCC

## SE2

## SEQ ID NO:20

GCTGGCGGCGTGCTTAACACATGCAAGTCGAACGATGAAGCCGCTTCGGTGGTGGATTAGTGGCGAACGGGTGAG  
TAACACGTGGGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTAATACCGGATAACACTCTGTC  
CCGCATGGGACGGGGTTGAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCTATCAGCTTGTGGTGGGGTAATG  
GCCTACCAAGGCGACGACGGGTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCAGACT  
CCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGAC  
GGCCTTCGGGTTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAA  
CTACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTA<sub>g</sub>  
CGGCTTGTACGTCGGATGTGAAAGCCCGGGGCTTAACCCCGGGTCTGCATTTCGATACGGGCTA<sub>g</sub>CTA<sub>g</sub>AGTGTG  
GTAGGGGAGATCGGAATTCCTGGTGTAGCGGTGAAATGCGCaGATATCA<sub>g</sub>GAGGAACA<sub>c</sub>CGGTGGg<sub>g</sub>AAGg<sub>c</sub>GGA  
TCTCTGGGcCa<sub>t</sub>TACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCTGGTAGTCCAAGC  
CGTAAACGTTGGGAAC<sub>t</sub>ANGTGTGGCGACATTCCACGTCGTGGTGCCGAGCTAACGCATTAAGTTCCCGGTC  
CTGGGGAGTACGGCCGCNAGGCTAAAGCTCAAAGGAATTGACGGGGGGCCCGCACAAGCAGCGGAGCATGTGGCTT  
ANTTCGACGCNACGCGAAGAACCTTNCCAAGGCTGACATATACCGgAAAGCATCA<sub>c</sub>AGATGGTGCCCCCTTGTG  
GTCGGTATACAGGgTGGTGCATGGCTGTtCGtCaGCTCGTGTCgtGAGATGTTGGGTTAaGTCCCGCAAAGAGCG  
CAACCgTGTTCGTGTGTGCCAGCATGCCCTTCGGGGTATGGGACTCa<sub>c</sub>AcGAgACTGTCNGGGTCAACTCgga  
GGAAGGTGGgGACGACgTCAAGTtCATCATGCCCTTATGTCTTGGGCTGCACACNGCTACAATGGCCGGTACA  
ATGAGNNGGGATGCCGCGAGGCGGAGCGAATCTCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTGACC  
CCATGAAGTCGGAGTTGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACGTNCCCGGGCCTNGTACACACC  
ACCGTCACTCACGAAAGTCGGTAACACCCTAAGCCGGTGNCCCAACCCCTTNTGGGAGG

## FIGURE 18

## PM36

## SEQ ID NO:21

CCAGANATCCGCCTTCGCCACCGGTGTTCCCTCCTGATATCTGCGCATTTACCGCTACACCAGGAATTCCGATCT  
CCCCTACCACACTCTAGCTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGGGCTTTACATCCGACGTGA  
CAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCGGGACAACGCTTGCGCCCTACGTATTACCGCGGCTGCTGG  
CACGTAGTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTGCTTCTTCCCTGCTGAAAGAGGTTTACAACCC  
GAAGGNCGTATCCCTCACGCGCGCTCGCTGCATCAGGCTTTGCGCCATTGTGCAATATTTCCCACTGCTGCCTC  
CCGTAGGAGTCTGGGNCGTGTTCAATNCCAGTGGTGGGCGCGTTCGCCCTCTCAGGNCGGCTACCGTCGTCGCCCTT  
GGTAGGCATTACCACAACAAGCTGATAGGCGGGGGTTCATCCTTCAACGCCGGAGCTTCAAACCCGTCCATGCGGG  
ACAAGTGTATCCGGTATTAAACCC

## PM40

## SEQ ID NO:22

TCAGTNATGGCCCAGAANGATCCGNCTTCGCCACCGGTGTTCCCTCCTGATATCTGCGCATTTACCGCTACACCA  
GGAATTCGGATCTCCCCTACCACACTCTAACTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGGGCTTTT  
ACATCCGACGTGACAAGCCGCCCTACGAGCTCTTNACGCCCAATAATTCGGGACAACGCTTGCGCCCTACGTATTA  
CCGCGGCTGCTGGCACGTAGTTAGCCGGCGCTTCTTCTGCAGGTACCGTNACTTTGCTTCTTCCCTGCTGAAAG  
AGGTTTACAACCCGAAGGCCGTCNTCCCTCACGCGCGCTCGCTGCATCAGGCTTTGCGCCATNGTGCANTATTCC  
CCACTGNTGNTCCCCTANGAGTCTGGGCGGTGTCTCAGTCCCAGTGTGGCCGGTCGNCCCTCTCAGGCCGGCTAC  
CGTCGTCGCCCTTGGTAGGNCATTACCCACCAACAAGCTGATANGTCGNGGGCTCATCCTTACCGNCGGAGNTTT  
AACCCCGTNCATGCGGGACAGAGTGTTATCCGGTATTANACCCGTATNCAGGGCTTGTCCCATAGTGAAGGGNAG  
ATNGCCACGTGTTATCACCCTTCGNCACTAATNATCANCGAANC GGCTTCATCGTTCGACTTG CATGTGTTA

## PM41

## SEQ ID NO:23

CTCAGCGTCAGTCATGGCCAAGAGATCCGCCTTCGCCACCGGTGTTCCCTCCTGTATATCTGCGCATTTACCGCT  
ACACCAGGAATTCGGATCTCCCCTACCACACTCTAGCTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGG  
GCTTTACATCCGACGTGACAAGCCGCCCTACGAGCTCTTTACGCCCAATAATTCGGGACAACGCTTGCGCCCTAC  
GTATTACCGCGGCTGCTGGCACGTAGTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTGCTTCTTCCCTGC  
TGAAAGAGGTTTACAACCCGAAGGCCGTCATCCCTCACGCGGCGTTCGCTGCATCAGGCTTTGCGCCATTGTGCAA  
TATTTCCCACTGCTGCCTCCCCTAGGAGTCTGGGCGGTGTCTCAGTCCCAGTGTGGCCGGTCGCCCTCTCAGGCC  
GGCTACCCGTCGTCGCCCTTGGTAGGCCATTACCCACCAACAAGCTGATAGGCCGCGGGCTCATCCTTCANCGNCG  
GAGCTTTAACCCGTCATGCGGGACAGAGTGTTATCCGGTATTAAACCCGTTTCAGGGCTTGTCCCANAGTGAAG  
GGCAGATTGCCACGTGTTATCANCCGTTTCGNCACTAATCACANCGAANC GGTTTCATCGTTCGACTTG CATGTGT  
TAA

## PM171

## SEQ ID NO:25

CCCTCAGGGTCAGTAATGGGCCCAGAGATCCGCCTTCGCCACCGGTGTTCCCTCCTGAATATCTGCGCATTTACCC  
GCTACACCAGGAATTCGGATCTCCCCTACCACACTCTAGCTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCC  
CGGGCTTTACATCCGACGTGACAAGCCGCCCTACGAGCTCTTTACGCCCAATAATTCGGGACAACGCTTGCGCCC  
TACGTATTACCGCGGCTGCTGGCACGTAGTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTGCTTCTTCCC  
TGCTGAAAGAGGTTTACAACCCGAAGGCCGTCATCCCTCACGCGGCGTTCGCTGCATCAGGCTTTGCGCCATTGTG  
CAATATTTCCCACTGCTGCCTCCCCTAGGAGTCTGGGCGGTGTCTCAGTCCCAGTGTGGCCGGTCGCCCTCTCAG  
GCCGGCTANCCGTCGTCGCCCTTGGGTAGGCATTANCCCANCAACAAGCTGATAGGNCGCGGGCTCATNCTTCAAC  
GCCGGAGCTTTCAANCCCGTCCATGCGGGACAGAGTGTTATNCGGTATTAAACCCGTTTCAGGGCTTGTTCAGAG  
GTGAAGGGCAGATTGCCACGTGTTATCAACCGTTTCGGCACTAATCACACGAAGCGGNTTATCGTTCGACTTGCA  
TGTGTTAACAAGCCGCCAGCGTTCGTC

## [FIGURE 18 CONTINUED]

PM185

SEQ ID NO:26

TCAGTAATGGCCCAGAGATCCGCCTTCGCCACCGGTGTTCTCCTGGATATCTGCGCATTTACACCGCTACACCAG  
GAATTCGGATCTCCCTACCACACTCTAGCTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGGGCTTTCA  
CATCCGACGTGACAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCCGGACAACGCTTGCGCCCTACGTATTAC  
CGCGGCTGCTGGCACGTAGTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTTCGCTTCTTCCCTGCTGAAAGA  
GGTTTACAACCCGAAGGCCGTATCCCTCACGCGGCGTCTGCTGCATCAGGCTTTTCGCCCATTGTGCAATATTCCC  
CACTGCTGCCTCCCGTAGGAGTCTGGGCGGTGTCTCAGTCCCAGTGTGGCCGGTTCGCCCTCTCAGGCGCGGTACC  
CGTCGTCGCCTTGGTAGGCCATTACCCACCAACAAGCTGATAGGCCGCGGGCTCATCCTTCACCGNCGGAGCTT  
TAACCCCGTCCCATGCGGGACAGAGTGTTATCCGGTATTAGAACCCGTTTCCAGGGCTTGTCCCAGAGTGAAGGG  
CAGATTGCCACGTGTTACTCANCCGTTTCGNACTAATCANCAACGAAGCGGCTTCATCGTTCGACTTGCATGTGT  
TAAGCACGCCGNCAGCGTTCGTCTGAGCCAGGATC

PM208

SEQ ID NO:27

TCAGTATCNGCCCAGAGATCCGCCTTCGCCACCGGTGTTTCTCCTGATATCTGCGCATTTACACCGCTACACCAG  
GAATTCGGATCTCCCTACCGAACCTCTAGCCTGCCCGTATCGACTGCAGACCCGGGGTTAAGCCCCGGGCTTTCA  
CAACCGACGTGACAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCCGGACAACGCTTGCGCCCTACGTATTAC  
CGCGGCTGCTGGCACGTAGTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTTCGCTTCTTCCCTGCTGAAAGA  
GGTTTACAACCCGAAGGCCGTATCCCTCACGCGGCGTCTGCTGCATCAGGCTTTTCGCCCATTGTGCAATATTCCC  
CACTGGTGNCTCCCGTANGAGTCTGGGGCGGTGTCTCANTCCAGTGTGGGCGGTTCGCCCTCTCAGGGCGGCTACCGT  
CGTCGCTTGGTGAGNCACTACTCACAACAAGCTGATAGGCCGCGGGCTCATCTGGAACGGCGGAGCTTTACAC

PM228

SEQ ID NO:28

TCAGTAATGGCCCAGANATCCGNCTTCGCCACCGGTGTTCTCCTGATATCTGCGCATTTACACCGCTACACCAGG  
AATTCGGATCTCCCTACCACACTCTAACTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGGGCTTTAC  
ATCCGACGTGACAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCCGGACAACGCTTGCGCCCTACGTATTACC  
GCGGCTGCTGGCACGTAGTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTTCGCTTCTTCCCTGCTGAAAGAG  
GTTTACAACCCGAAGGCCGTATCCCTCACGCGGCGTCTGCTGCATCAGGCTTTTCGCCCATTGTGCAATATTCCCC  
ACTGCTGCCTCCCGTANGAGTCTGGGCGGTGTCTCAGTCCCAGTGTGGCCGGTTCGCCCTCTCAGGCCGGCTACCG  
TCGTGCCTTGGTAGGCCATTACCCACCAACAAGCTGATANGNCGNGGGCTCATCCTTCACCGNCGGAGCTTTCA  
ANCCCGTCCCATGCGGGACAGAGTGTTATCCGGTATTAAACCCGNTTCCAGGGCTTGTCCATAGTGAAGGGCAGA  
TTGCCAAGTGTTATCANCCGTTTCGNACTAATCATCANCAAGCGGCTTCATCGTTCGACTGCATGTGTT

PM252

SEQ ID NO:29

TCCTCAGNATCAGTAATGGCCCAGAGATCCGCCTTCGCCACCGGTGTTCTCCTGATATCTGCGCATTTACACCGC  
TACACCAGGAATTCGGATCTCCCTACCACACTCTANCTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCG  
GGCTTTCACATCCGANGTGACAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCCGGACAANGCTTGCGCCCTA  
CGTATTACCGCGGNTGCTGGCACGTAGTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTTCGCTTCTTCCCTG  
CTGAAAGAGGTTTACAACCCGAAGGCCGTATCCCTCACNCGGCGTCTGCTGCATCAGGCTTTTCGCCCATTGTGCA  
ATATTCCCCACTGCTGCCTCCCGTAGGAGTCTGGGCGGTGTCTCAATCCCANTGTGGCCGGTTCGCCCTCTCANGC  
CGGCTACCGTCTGCTGCTTGGTAGGCCATTACCCACCAACAAGCTGGATAGGNCGGGGGCTCATCTTTCACCGCC  
GGAAGCTTTAANCCCGTCCATGCGGGANANAGTGNATCCCNATTAACCCNGTTTCAGGGCTTGTCCANAGTG  
AAGGNGATTGCCNAGTGTTTATCNCCCGTTCGCCANTAATCNACAACGAAGCGGNTTCNCTCGNTTCGACTTG  
C



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**[FIGURE 18 CONTINUED]**

PM342

SEQ ID NO:30

TAATGGCCCAGAAATCCGCCTTCGCCACCGGTGTTCCCTCCTGAATATCTGCGCATTTACCGCTACACCAGGAA  
TTCCGATCTCCCCCTACCACACTCTAGCTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGGGCTTTCACAT  
CCGACGTGACAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCCGGACAACGCTTGCGCCCTACGTATTACCGC  
GGCTGCTGGCACGTAGTTAGCCGGCGCTTCTTCTGCGAGGTACCGTCACTTTCGCTTCTTCCCTGCTGAAAGAGGT  
TTACAACCCGAAGGCCGTATCCCTCACGCGGCGTCGCTGCATCAGGCTTTCGCCCATTGTGCAATATTCCCCAC  
TGCTGCCTCCCGTAGGAGTCTGGGCCGTGTCTCAGTCCCAGTGTGGCGGTGCGCCCTCTCAGGCCGGNTANCCGTC  
GTCGCCTTGGTANGCCATTANCCCAACAAGCTGATANGCCGNGGGCTCATCCTTCANCGCCGGAGCTTTTAA  
CCCCGTCCCATGCGGGACAGAGTGTATCCGGTATTAGATCCCGTNTCCAGGGCTTGTNCATAGTGAAGGGCANA  
TTGCCACGTGTTACTCANCCGTTCGC

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## FIGURE 19

## EN4

GGCGGCGTGCTTAACACATGCAAGTCGAACGATGAACCACTTCGGTGGGGATTAGTGGCGAACGGGTGAGTAACA  
CGTGGGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTtAATACCGGATAACACTCCCCTCTC  
CTGAGTGGGGGTAAAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCCTATCAGCTTGTGGTGAGGTAATGGCTC  
ACCAAGGCGACGACGGGTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCCCAGACTCCTA  
CGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCTGAGGGATGACGGCC  
TTCGGGTTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTACGGTACCTGCAGAAGAAGCGCCGGCTAACTAC  
GTGCCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGCGGC  
TTGTACAGTCGGGTGTGAAAGCCCGGGGCTTAACCCCGGGTCTGCATTTCGATACGGGCTAGCTAGAGTGTGGTAG  
GGGAGATCGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATTGAGGAGGAACACCGGTGGCGAAGGCGGATCT  
CTGGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGT  
AAACGGTGGGAACTAGGTtGTTGGCGACATTCCACGTCGTGGTGGCGCAGCTAACGCATTAAGTTCCCCGCGCTG  
GGGAGTACGGCCGCAAGGCTAAACTCAAAGGAATTGACGGGGGGCCCGCACAAGCAGCGGAGCATGTGGCTTAAT  
TCGACGCAACGCGAAGAACCCTTACCAAGGCTTGACATACACCGGAAAGCATCAGAGATGGTGCCCCCTTGTGGT  
CGGTGTACAGGTGGTGCATGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAAC  
CCTTGTTCTGTGTGTCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGACCGCCGGGGTCAACTCGGAGGAA  
GGTGGGGACgACGTCAAGTCATCATGCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCAGGTACAATGAG  
CTGCGATACCGTGAGGTGGAGCGAATCTCAAAAAGCCTGTCTCAgTTCGGATTGGGGTCTGCAACTCGACCCcaT  
GAAGTCGGAGTTGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCC  
GTCACGTACGAAAGTCGGTAACACCCGAAGCCGGTGGCCCAACCCCTTGTGGGAGGGAGCTGTCAAGGTGGGA  
CTGGCGATTGGG

## EN10

GAGTTTGATCNNGGCTCAGACGAACGCTGGCGGCGTGTTAACACAANCCAAGTCGAANGNTGAACCACTTCGTTG  
GGATTAGTGCGAACGGTGNTAACACGNTGGCAATGTGCCCTTCACTNTGGGACAAGNCTGGAAACGGGGTTCTA  
ATACCGGATAACCACTACCCGCAGGCATCTGTGGTGTGTTGAAAGCTCCGCCGTGAAGGATGAGCCCGCGGCCTAT  
CAGCTTGTGGTGAGGTAATGGCTCACCCAAGGCGACGACGGATAGCCGGCCTGAGAGGGCGACCGGCCACACTG  
GGACTGAGACACGGCCCAGACTCCTACGGAGGCGAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAG  
CGACGCCGCGTGAGGGATGACGGCCTTCGGGTTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACC  
TGCAGAAGAAGCGCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTAT  
TGGGCGTAAAGAGCTCGTAGGCGGCTTGTACGTCGGGTGTGAAAGCCCGGGGCTTAACCCCGGGTCTGCATTTCG  
ATACGGGCTAGCTAGAGTGTGGTAGGGGAGATCGGAATTCCTGGTGTACCCGGTGAAATGCGCAGATATCAGGAG  
GAACACCGGTGGCGAAGGCGGATCTCTGGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGAT  
TAGATACCCTGGTAGTCCACGCCGTAAACGGTGGGAACTAGGTGTTGGCGACATTCCACGTCGTGGTGCCGCGAG  
CTAACGCATTAAGTTCCCCGCTGGGGAGTACGGCCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCGCAC  
AAGCAGCGGAGCATGTGGCTTAATTCGACGCAACGCGAAGAACCCTTACCAAGGCTTGACATACGCCGGAAGCAT  
CAGAGATGGTGCCCCCTTGTGGTGGTGTACAGGTGGTGCATGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGG  
GTTAAGTCCCGCAACGAGCGCAAcCCTTGTCTGTGTTGcCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGA  
GACCGCCGGGGTCAACTCGGAGGAAGGTGGNGACGACGTCgAGTCATCATGCCCTTATGTCTTGGGGCTGCACA  
CGTGCTACNATGggCaGGTACAATGAGCTGCGATACCGTGAGGTGGAGCgCATCTnnnnnAGCctGTCTCAGTTC  
GgATTGGGGTCTGcAACTCGACCCCaTGAAGTCGgAGTTGCTAgATAATCgCAgATCAGCATTGctGCGgTGAAT  
ACGTtCCCGGGCCTTGTACACACCGCCCGTCACGTACGAAAGTCGGTAACACCCGAAGCCGGTGGCCCAACCC  
TTGTGGGAGGGAGCTGTCAANGTGG

**[FIGURE 19 CONTINUED]****EN22**

TCCTCAGCGTCAGTAATGGCCCCAAAAACCGCCTTCGCCACCGGTGTTCTCTGATATCTGCGCATTTACACCGCT  
ACACCAGGAATTCNATCTCCCCTACCACACTCTAGCTAGCCCGTATCNAATGCAAACCCGGGGTTAANCCCCGG  
GCTTTACATCCNACNTGACAAGCCGCTTACAANCTCTTTACGCCCAATAATCCGGACAACNCTTGCGCCCTAC  
TTATTACCGCGGCTGCTGGCACTTATTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACCTTCGCTTCTTCCCTGC  
TGAAAAAGGTTTACAACCCNAAGGCCGTATCCCTCACGCGGNTCNCCTGCATCAGGCTTTNCCCATTTGTGCAA  
TATTCCTCCACTGCTGCCTCCCGTAGGATTCTGGGCGTNTCTCANTCCANTGTGGCCGGTTCGCCCTCTCAGGCC  
GGCTACCCGTGCTCNCCTTGGTAGGCCATTACCCCNCCAACAANCTGATAGGCCGCGGGCTCNCCTTCACCGCC  
GGAGCTTTCAACCCCGTCCCATGCGGGANAAANTGTTNTCCGGTATTAAAACCCGTTTCCAGGGNTTGTCCAAA  
TTGAAGGGNANATTGCCCACTTTTNNTCACCCGTTCCCACTAATCCACCACCGAA

**EN30**

TGGNGNGTGCTTAACACATGCAAGTCGAACGATGAANCCTTTTCGGGGTGGATTAGTGGCGAACGGGTGAGTAAC  
ACGTGGGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAACGGGGTCTAATACCGGATAACACTCTGTCCCGC  
ATGGGACGGGGTTAAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCCTATCAGCTTGTGGTGGGGTGATGGCCT  
ACCAAGGCGACGACGGGTAGCCGGCCTGAGAGGGCGACCGCCACACTGGGACTGAGACACGGCCAGACTCCTA  
CGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACCCGCGTGAGGGATGACGGCC  
TTCGGGTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACTAC  
GTGCCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTANGCGGC  
TTGTACGTCCGATGTGAAAGCCCGGGGCTTAACCCGGGTCTGCATTGATACGGGCTAACTAAAATGTGGTAGG  
GGAGATCCGGAATTCCTGGTGTANCGGTGAAATGCGCAGATATCAAGAGGAACANCGGTGGCGAANGCGGATCTCT  
GGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCTGGTAGTCCACGCCGTAA  
ACGTTGGGAAC TAGGTGTTGGCGACATTCCACGTCGTCGGTGCCGAGCTAACGCATTAAGTTCCCGCCTGGGG  
AGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTGACGGGGGCCGACAAAGCAGCGGAGCATGTGGCTTAATTG  
ACGCAACGCGAAGAACCTTACCAAGGCTTGACATATACCGGAAAGCATCAGAGATGGTCCCCCTTGTGGTCCG  
TATACAGGTGGTGCATGGCTGTCGTGAGCTCGTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCT  
TGTTCTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGACTCACAGGAGACTGCCGGGGTCAACTCGGAGGAAGG  
TGGGGACGACGTCAAGTCATCATGCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCGGTACAATGAGCT  
GCGATGCCGCGAGGCGGAGCGAATCTCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTCGACCCcATGA  
AGTCGgAGTTGCTAgTAATCgAgATCAgCATTGCTGCGGTGAATACgTTNCCGGGCCTtGTACAcACCGCCGT  
CACGTCACgAAAGTCGGTAACACCCGAAGNCCGGTGGTCCAACCCCTTGTGGGAGGGAGACTGTGGAAGGTGGGA  
CTGGCGATTGG

**EN43**

CTCAGCGTCACTATCGGCCCAAAANACCGCCTTCGCCACCGGTGTTCTCTGATATCTGCGCATTTACACCGCTA  
CACCAGGAAATTCANTCTCCCCTACCGAACTCTANCTGCCCGTATCAACCGCAGGCTTGGGGTTAAGCCCCAA  
TTTTTCACGGTCAACGCNACAAGCCGCTTACAAGCTCTTTACGCCCAATAAATCCGGACAACGCTCGCACCCCTAC  
TTCTTACCGCGGCTGCTGGCACTTATTTGGCCGGTGCTTCTTCTGCAGGTACCGTCACTCTCGCTTCGTCCTGC  
TNAAAAGGTTTACAACCCGAAGGCCGTATCCCTCACGCGGNTCGCTGCATCAGGCTTCGCCCCATTGTGCAA  
TATTCCTCCACTGCTGCCTCCCGTAGGATTCTGGGCGTNTCTCANTCCAGTGTGGCCGGTTCGCCCTCTCAGGCC  
GGCTACCCGTGCTGCCTTGGTAGGCCATACCCCAACCAAGCTGATAGGCCGCAAGCCCATCCAAGCCGA  
AAAACCTTTCCACCACCAGCCATGCGGCCAAAAATTCCTATTTCGGTATTAGCCCCCGTTTCNAAGGTTNTCCCAA  
GCTTGGGGCAGGTTGCTCACTTTTTACTCACCCGTTCCCGCTCAATTACCCNAAGGGGNTTTCCTCAACTTGC  
AT

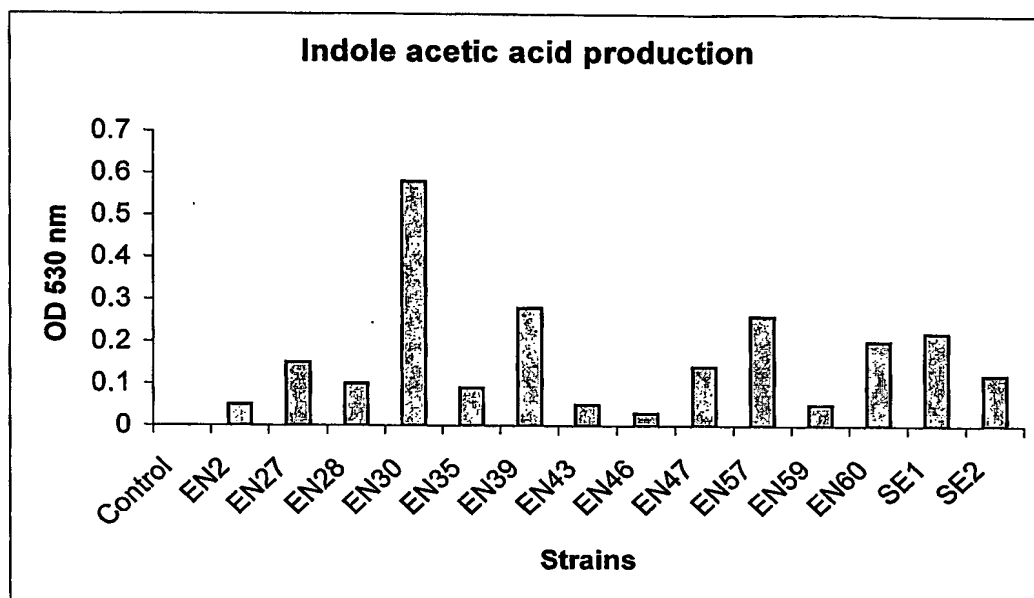
**[FIGURE 19 CONTINUED]****EN47**

CGCTGGCGGCGTGCTTAACACATGCAAGTCGAGCGGAAAGGCCCTTCGGGgTACTCGAGCGGCGAACGGGTGAGT  
AACACGTGAGTAATCTGCCCCAGGCTCTGGGATAGCCACCGGAAACGGTGATTAATACCGGATACGACAACCGAT  
TGCATGATCTGGTTGTGGAAAGTTTTTCGGCCTGGGATGTGCTCGCGGCCTATCAGCTTGTGGTGAGGTAATGG  
CTCACCAAGGCTTCGACGGGTAGCCGGCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCAGACTC  
CTACGGGAGGCAGCAGTGGGGAATATTGGACAATGGGCGGAAGCCTGATCCAGCAACGCCGCGTGAGGGATGACG  
GCCTTCGGGTGTAAACCTCTTTCAGCACAGACGAAGCGCAAGTGACGGTATGTGCAGAAGAAGGACCGGCCAAC  
TACGTGCCAGCAGCCGCGGTAATACGTAGGGTCCGAGCGTTGTCCGGAATTATTGGGCGTAAAGGGCTCGTAGGC  
GGTCTGTGCGGTCGGGAGTGAAAACCAAGTGCTTAACACCTGGCCTGCTTTCGATACGGGCAGACTAGAGGTACT  
CAGGGGAGAATGGAATTCCTgGTGTAGCGGTGAAATGCGCAGATATTAGGAGGAACACCGGTGGCGAAGGCGGT  
TCTCTGGGAGTATCCTGACGcTTGAAGAGCGAAAGTGTTGGGAGCGAACAGGATTAGATANTNTGGTAGTCCACA  
CCGTAAACgTTGGGCGcTAGgTGTGGGACACATTCCACGTGTTCCGTGCCGCAGCTAACGCATTAAGCGCCCCGC  
CTGGGGAGTACGGCCGCAAGGCTAAACTCAAAGGAATTGACGGGGCCCGCACAAAGCGGCGGAGCATGCGGATT  
AATTTCGATGCAACGCGAAGAACCTTACCTGGGTTTGACATACACCGGAAAGCCGTAGAGATACGGCCCCCTTTTAG  
TCGGTGTACAGGTGGTGATGGCTGTCGTGCTGCTGAGATGTTGGGTTAAGTCCCACACGAGCGCAA  
CCCTCGTCTATGTTGCCAGCAATTCGGTTGGGACTCATAGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGG  
GATGACGTCAAGTCAATGCTGCCCCCTATGTCCAGGGCTTACGCATGCTACAATGGCCGGTACAAAGGGCTGCGA  
TCCCGTGAGGGTGAGCGAATCCCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTC  
GGAGTCGCTAGTAATCGCAGATCAGCAACGCTGCGGTGAATACGTTCCCGGCCCTTGTACACACCGCCCGTCACG  
TCACGAAAGTCGGCAACACCCGAAGCCAGTGGCCCAACCCTTGTGGGGGAGCTGTCAAGGTGGGGCTGGCGAT  
TG

**EN59**

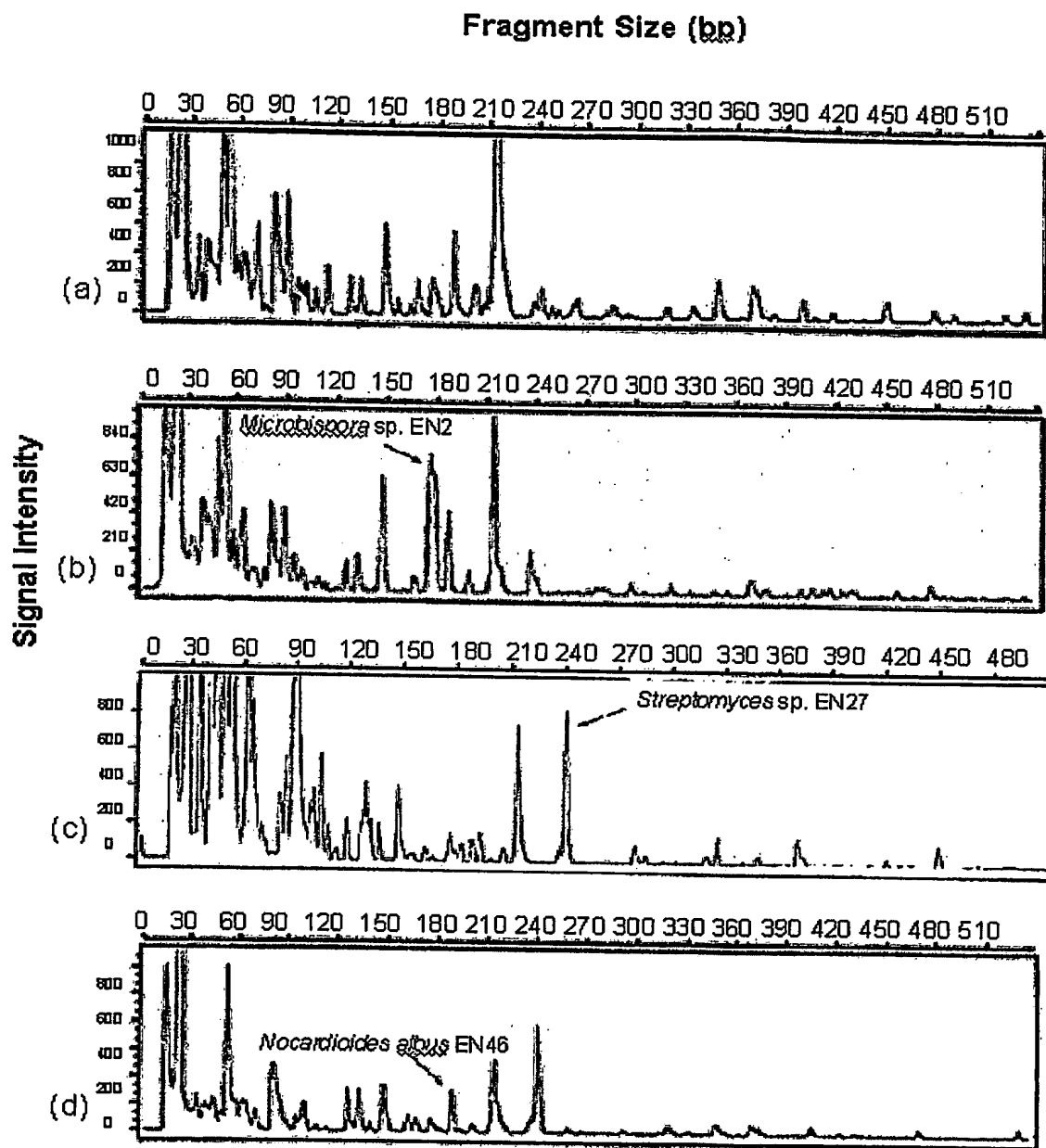
GGGNATTAGTGGGGAACGGGTGAGTAAAANGTGGCCANTTTCCCCTGNATTTTGGACANCCCCNGGAAANGGNTT  
NTAAAACNGGATANTGACCACCTTGGCATCCAAGTTTTNGAACTTCGGGCGGTGCAGGATGAGCCNGCGGCNTA  
TNAGCTTGTTGGNGAGGTAATGGNTCACCAAGGGANGACGGGTAGCCGGCCTGAGAGGGGACCNGCCACANTGGG  
ANTGAGANACGGCCCAGANTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGG  
ANNCCGCGTGAGGGANGACGGCCTTNGGGTTGTAAACNTTTTTNAGCAGGGAAGAAGCGAAAGTGACGGTACCTG  
CAGAAGAAGCGCCGGCTAAATAAGTGCCAGCAGCCGCGTAATAAGTAGGGNGCGAGCGTTGTNCGGAATTATTG  
GGNGTAAAGAGTTTGTAGGCGGNTTGTNAAGTNGGTTGTGAAAGCCCGGGGNTTAACCCCGGGTTTGCAGTTGAT  
ACGGGCAGGNTAGAGTTCGGTAGGGGAGATNGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAA  
CACCGGTGGCGAAGGCGGATCTCTGGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAG  
ATACCCTGGTAGTCCACGCCGTAAACGGTGGGAAGTAGGTGTTGGCGACATTCCACGTGCTCGGTGCCGCAGCTA  
ACGCATTAAGTTCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCCGCACAAG  
CAGCGGAGCATGTGGCTTAATTCGACGCAACGCGAAGAACCCTTACCAAGGCTTGACATACACCGGAAAGCATCAG  
AGATGGTGCCCCCCTTGTGGTGGTGTACAGGTGGTGCATGGCTGTCGTGAGCTCGTGTGAGATGTTGGGTT  
AAGTCCCACGACGAGCGCAACCCTTGTCTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGAC  
CGCCGGGGTCAACTCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCTTATGTCTTGGGCTGCACACGTG  
CTACAATGGCCGGTACAAAGAGCTGCGATACCGTGAGGTGGAGCGAATCTCAAAAAGCCGGTCTCAGTTCGGATT  
GGGGTCTGCAACTCGANCCCATGAANTCGGAGTTGCTAATTAATCGCAAAATCAAGCATTGCTGGCGGTGAATAC  
GTTCCC

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**Figure 20**

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Figure 21



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